

MARCH

Whole Earth Catalog

\$1



THE WORLD GAME

"I travel around the world a great deal, and everywhere I hear humanity saying, 'We are not against any other human beings; we feel the world ought to work properly.' Everywhere they say it's our politicians that get us into trouble. This is the majority viewpoint all around the earth today."

—R. Buckminster Fuller

See page 30

FUNCTION

The *WHOLE EARTH CATALOG* functions as an evaluation and access device. With it, the user should know better what is worth getting and where and how to do the getting.

An item is listed in the *CATALOG* if it is deemed:

- 1) Useful as a tool,
- 2) Relevant to independent education,
- 3) High quality or low cost,
- 4) Easily available by mail

CATALOG listings are continually revised according to the experience and suggestions of *CATALOG* users and staff.

PURPOSE

We are as gods and might as well get good at it. So far remotely done power and glory—as via government, big business, formal education, church—has succeeded to the point where gross defects obscure actual gains. In response to this dilemma and to these gains a realm of intimate, personal power is developing—power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested. Tools that aid this process are sought and promoted by the *WHOLE EARTH CATALOG*.

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New York, New York
Burr Oak, Michigan
Portal, Arizona
Cambridge, Massachusetts

CONTENTS

Corrections Fall 69 Catalog 5

- | | | | |
|---|-----------------------------------|---|---|
| 5 | Untitled Epic Poem | 6 | Brookstone Tools |
| | The Human Use of Human Beings | | The Book of Country Crafts |
| | The Human Condition | | Craft and Hobby Book Service |
| | The King and the Corpse | | Complete Book of Progressive Knitting |
| | The Futurist | | Indian Crafts and Lore |
| | Earth for Homes | | Classic Guitar Construction |
| | Architectural Graphic Standards | | World of Mathematics |
| | Blasting | | Graphic Work of M. C. Escher |
| | Solar Stills | | Handbook of Mathematical Functions |
| | New Scientist | | Village Planning in the Primitive World |
| | Science and Civilization in China | | Lightweight Camping Equipment |
| | Handbook of Chemistry and Physics | | New Science of Skin and Scuba Diving |
| | | | Teacher |
| | | | Using Libraries Effectively |

Item-related Information 7

- | | | | |
|---|------------------------------------|---|-------------------------------|
| 7 | The Subversive Science | 9 | High School Underground Paper |
| | Seeds | | Here Comes the Harley |
| | Science & Civilization | | Starmaker |
| | Dyna Technology | | Potter's Wheel |
| | Macramé | | The Environment Monthly |
| | Trouble Looms | | From a Chemist |
| | Math | | Island Fantasy |
| 8 | McBee Maligned | | In the Woods |
| | From a Medical Student | | |
| | True Grit | | |
| | Barbour + | | |
| | No More Innovator | | |
| | Creative Playthings? | | |
| | National Outdoor Leadership School | | |
| | Dulcimers | | |

New Suggestions 10

- | | | | |
|----|-----------------------------|----|----------------------------------|
| 10 | Amway, etc. | 16 | AAA |
| | Alconox | | Margaret Cherran Suggests |
| | Summerhill | | Rent It |
| | More Birth Books | | Book Service |
| | Shaklee | | Build-a-Boat |
| 11 | Children of the World | | Bishop's Ultimate Tent |
| | Son of Brown Rice | | Sweaters Shoes & Gear |
| | Sprouts and Sea Fare | | Land Again |
| | D. Mayerson Suggests | | Grab Bag |
| | Yeast | | Cable Winch |
| | About Tea, Coffee, & Spices | 17 | Noumedia Tapes |
| | Acorn Meal | | Neil B. Wolf Suggests |
| 12 | All you farmers-to-be | | Free Lumber, Hardware, Etc. |
| | How to Identify Plants | | Make Movies |
| | Indoor Greenery | | Parchment |
| | Seeds | | Forms in Japan |
| | More Seeds | | Martin B. Tittle Suggests |
| | David Pace | | Larry McCombs Suggests |
| | Working With Glass | | Bat Glider Plans |
| | Alaskan Camp Book | 18 | Really! |
| | Woman's Day Co-op | | Sour Power |
| | Spinning Wheels | | Paul Bandy Suggests, Beautifully |
| | Violet Jelly! | | Origami |
| 13 | Creative Casting | | P.O. Envelopes |
| | Gladney Oakley Suggests | | HRAF |
| | Rip Rap Sacker | | Dropping Out, etc. |
| | John Holt Suggests | 19 | The Economy of Cities |
| | Silk | | Physician's Desk Reference |
| | Fuses and Cannons | | The Parable of the Beast |
| | Bill Lange Suggests | | Earth Rape, with optimism |
| | Fred says— | | Lyle Burkhead sure knows math |
| 14 | Guitars | | Charles Fort |
| | Economy Music | 20 | The Rise of the West |
| | Steve Schlossman suggests | | Chemical Abstracts |
| | OK | | Space Enclosure Systems |
| | Bird Houses | | Psonics |
| | Return of Hong Kong | | The Hubble Atlas of Galaxies |
| | Chemicals | | Stephan Chodorov Suggests |
| | Knives and Pipes | | ARP Synthesizer |
| | Cabin House Project | | Science & Sanity |
| 15 | Spin Fishing | | |
| | Adobe Hacienda | | |
| | Angier Books | | |
| | Porta-Shower | | |
| | Alternate Society | | |
| | Know Snow, he said | | |
| | Movin On | | |
| | Peter Limmer Boots | | |
| | Boy Scout Boats | | |

Other People's Mail 21

- | | | | |
|----|--|----|--------------------------------|
| 21 | People in Stone Houses | 22 | Far Out |
| | Canada Footnote | | More on Wind Generators |
| | To Dick Fairfield | | Who's Got the Straight Skinny? |
| | Dig Warts | | Complaint |
| | Yeah | | Billy Kieth Crum says |
| | Brazil Revisited | 23 | Letter from New Mexico |
| | Notes from Down Under | | |
| | Anyone want a soapstone pipe business? | | |
| | Politics at Last | | |

Death, Old Friend 24

- | | | | |
|----|--------------------------------|----|--------------------------------|
| 24 | A Funeral | 26 | Tibetan Burial |
| | Do-It-Yourself Burial for \$50 | | Funeral and Memorial Societies |
| 25 | Park of the Ever Living | 27 | Old People Birth |
| | Anyone Want to Die Here? | | |
| | On Death and Dying | | |
| | The Hospital Death | | |

A Sense of Place 28

- | | | | |
|----|----------|----|--------------|
| 28 | KENTUCKY | 29 | STRIP-MINING |
|----|----------|----|--------------|

World Game 30

Ecology 32

- | | | | |
|----|----------------------------|----|---------------------------|
| 32 | The Environmental Handbook | 34 | Underground, Overground |
| 33 | In Celebration of Worms | | Getting to Know You |
| | Ritual | | Neighborhoods, Arise! |
| | Shit | | Whole Earth Salvaging Co. |
| | Dead Drunk Slugs | | Some Ideas on the |
| | | | "Lifehouse" Concept |

Process 35

- | | | | |
|----|--------------------------------|----|------------------------------------|
| 35 | Heat Circulating Fireplace | 41 | A Bicycle Page for You |
| 36 | Growhole | 42 | Intrepid Trips Information Service |
| 38 | Cheese, Yogurt, & Beer | 43 | Cut the Motherfuckers Loose |
| | Biorythms & Reality, with Zest | 44 | The Land and the People |
| 39 | Learn Blacksmithing | | Revolutionary Letter # 3 |
| | You'll Build Your Next | | When the Enemy Attacks |
| | House of Molasses | 45 | Foxfire |
| | Cooling & Heating | 46 | Report from a Nomad |
| | Thoughts on Space Heaters | | Dear People |
| 40 | The Use of Propane | | Subsidizing destruction |
| | Model Rockets | | |

Extra 47

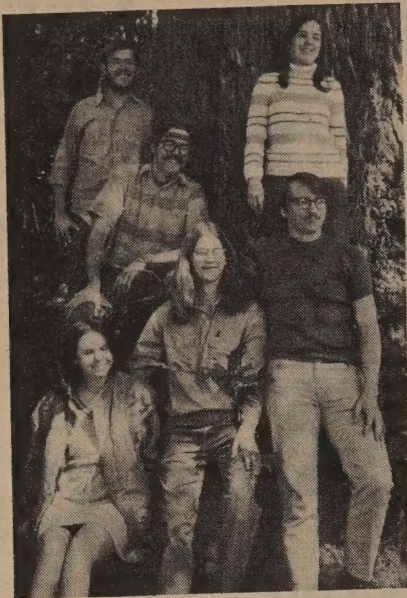
- | | | | |
|----|------------------------------|----|-------------------------------------|
| 47 | FURTHER CORRECTIONS | 49 | Letter from New Mexico, (continued) |
| | Windmills | | Good Words on Goats |
| | The Way Things Work | | So What's Your Reason for |
| | Unistrut | | Going to the Woods? |
| | Gem Guild | | Soviet Books: da |
| | Wildcrafters | | More New Schools |
| | Preparation for Childbearing | 50 | Japanese Saws |
| | Cuisenaire Rods | | Invitation to Craftsmen |
| | New Schools Exchange | | Commune List |
| | Dymaxion Sky-Ocean World Map | | Water & Land |
| | Meccano | | Light Dissent |
| | Merck Manual | | From Bindu to Ojas |
| | Remarks on Ashley | | Australian Dyes & Wools |
| | Hot Scandal Cooled | | Creative Ecology |
| | Think | | Clouds and Fog to Order |
| | Negative Ion Generators | | NASA Films |
| 48 | More on Fish Protein | 51 | Navigation |
| | Gasp, Splutter | | Underground Stable |
| | Vision, With Rap | | But Will They Sell it to Us? |
| | Horse Freaks of the World | | Pottery Books |
| | Skinny Dipping Patrols | | Meditation |
| | Ham Radio | | Transits & Levels |
| | I'm Not Surprised | | Handy Medical Guide for Seafarers |
| | | | Make Your Own Space Blanket |
| | | | Another VW Book |
| | | | Volks-Rack |

Truck Store 52

- | | | |
|----|------------------------------------|------------------------------|
| 52 | Gripes | Canadian Whole Earth Almanac |
| | Introducing Divine Right Davenport | Electroniks |
| | Delta Mist is Here | Another Possibility |
| | Frederick the Mouse | |

Business 53

CATALOG Procedure



Ordering from the CATALOG

Address orders to the supplier given with the item (unless you know of a better one; if you do, let us know).

If the price listed is not "postpaid", consult post office or express agency for cost of shipping from supplier's location to yours.

Add state sales tax if transaction is within your state. (California sales tax is 5%.)

Send check or money order with your order.

Blank order envelopes are provided at the back of the CATALOG for your convenience and so that suppliers have some idea of the CATALOG's effect on their business.

If the supplier gives you poor service, let us know. That information can be added to his review.

With some indicated items the CATALOG also will ship. There is no price difference with the service; the CATALOG gets the markup instead of the other guy, is all. Our service is fairly fast, especially for west coast orders. Bear in mind there's an inflation on. Prices are subject to rise without notice.

Generally, the closer the supplier is to you, the quicker and cheaper the shipping will be. If the item you're getting is delicate or if you are in a hurry, air express is a good deal. Anything overseas do by air, unless you want to wait a month or so for delivery.

Subscribing to the CATALOG

\$8.00 per year. This includes six issues, two big ones (Fall and Spring) and four smaller ones. Subscription forms are at the back. Memorize your zip code. If your address changes, you must tell us, because the Post Office won't forward.

Suggesting and Reviewing

The validity of the information in the CATALOG is only as good as the transmitted experience of users. What would you add to the current CATALOG?

The CATALOG pays its reviewers \$10 an item for: getting familiar with the item, its usefulness, and its competition; evaluating the item; selecting samples of graphics or text (with page references) for the review; writing a 100-300 word review. Reviewers and first-suggestors of items are credited in the CATALOG.

We invite reviews that improve on present reviews or accompany suggestions for new items. On acceptance for CATALOG publication reviewers are paid \$10 per accepted review. Unused reviews are not returned. Appearance of submitted material doesn't matter unless it is meant to be camera-ready.

Corresponding

Commentary from CATALOG users that is of general interest is published in the \$1 Catalog. Critical comments, new design processes, no-cash techniques, news of specific enterprises, useful fantasies, design student work, time and trouble shortcuts, new uses for common or exotic materials, other realms for the CATALOG to consider, &c., &c., — welcome.

Donating

Portola Institute, Inc. is a tax-exempt, non-profit educational corporation. Donations to Portola or the CATALOG may be deducted. Retaining subscriptions to the CATALOG are \$25 for one year (\$17 tax deductible). Sustaining subscriptions are \$100+ per year (\$92+ tax deductible). Names of retaining and sustaining subscribers are given in the CATALOG.

Gifts and Informal Resale

CATALOGs are available in quantities of 5 or more at 25% discount. Thus you can get 5 CATALOGs for \$15, sell four, keep one, and come out \$1 ahead. There is no quantity discount on subscriptions.

For formal resale, see p. 54.

Advertising

Suppliers, manufacturers, creators of listed items are eligible to advertise in the Fall and Spring CATALOGs. They may advertise only an item listed or their own catalog. All ads are placed at the back of the book. There are no ads in the \$1 Catalog.

Advertising rates:

Full page \$200	\$75	full page 10 1/2" x 14 1/2"
		1/2 page 10 1/2" x 7"
\$25	\$10	1/4 page 5 1/4" x 7"
		1/8 page 5 1/4" x 3 3/8"
	\$5	1/16 page 2 1/2" x 3 3/8"

CATALOG Policy with Suppliers and Users

The CATALOG is under no obligation to suppliers. Users are under no obligation to the CATALOG.

Suppliers (manufacturers, creators, etc.) may not buy their way into the CATALOG. Free samples, etc. are cheerfully accepted by CATALOG researchers; response not predictable. No payment for listing is asked or accepted. We owe accurate information exchange to suppliers, but not favors.

Our obligation is to CATALOG users and to ourselves to be good tools for one another.

This issue

Stewart is resting up for the spring catalog push. This Bodoni Book type is guest editor Gurney Norman speaking. And I am associate editor Diana Shugart, speaking in *italic*. The people we helped get this issue out are:

Cappy McClure	John Clark	Bernie Sproch
Hal Hershey	Les Rosen	Megan Raymond
Mary McCabe	Russell Bass	Pam Smith
Fred Richardson	Peter Ratner	Mary Jo Morra
while	Laura Besserman	Bill Bourland
Lois Brand	Alan Burton	Soni Stoye
Tracy McCallum	Jerry Fihn	Austin Jenkins
	Leslie Acoca	carried on at the store.

Preparation of the CATALOG was done on an IBM Selectric Composer, Polaroid MP-3 camera, and Stat-King camera. Printing by Nowels Publications, Menlo Park.

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Fall CATALOG — November	Spring CATALOG — May
\$1 Catalog — January	\$1 Catalog — July
\$1 Catalog — March	\$1 Catalog — September

Fall 69 CATALOG Corrections

p.3

Untitled Epic Poem on the History of Industrialization

New name, new price, new source:

\$1.95 postpaid

from:
Simon & Schuster, Inc.
630 Fifth Avenue
New York, N. Y. 10020

or WHOLE EARTH CATALOG

p.26

Earth for Homes is no longer available free from the Department of Housing and Urban Development. New access is:

Handbook for Building Homes of Earth
No. PB 179 327

\$3.00 postpaid

from:
U. S. Department of Commerce
Clearinghouse for Federal Scientific and Technical Information
Springfield, Virginia 22151

p.42

New Scientist either has a new address, or we had it wrong all along. It should be:

New Scientist
128 Long Acre
London WC 2
ENGLAND



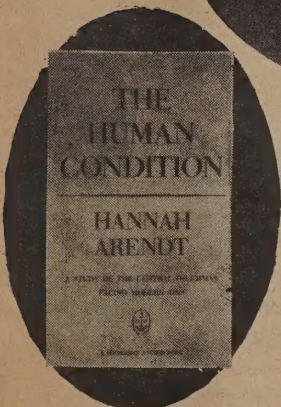
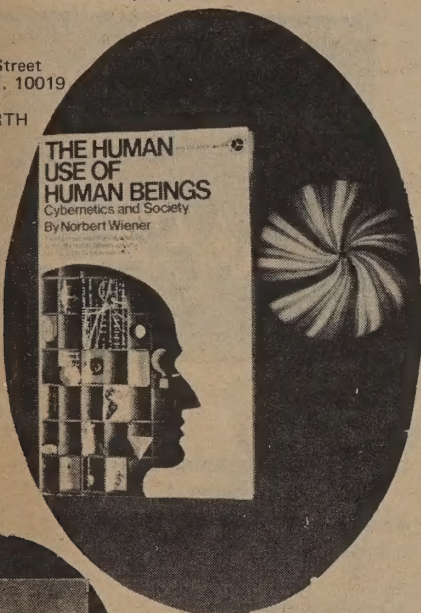
p.12

The Human Use of Human Beings

is up from \$1.25 to \$1.45 postpaid

from:
Avon Books
250 West 55th Street
New York, N. Y. 10019

or WHOLE EARTH CATALOG



The Human Condition
is up from \$1.45 to \$1.75 postpaid

from:
Doubleday & Co.
501 Franklin
Garden City, N. J. 11531

or WHOLE EARTH CATALOG

p.29

Architectural Graphic Standards

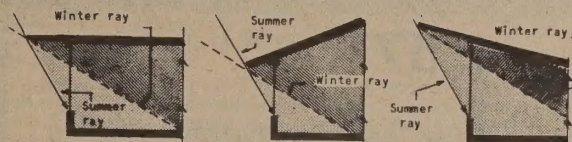
was \$18.00; is now \$22.50 postpaid

from:

John Wiley & Sons
1 Wiley Drive
Somerset, N. J. 08873

Western Distributor:
1530 South Redwood Road
Salt Lake City, Utah 84104

or WHOLE EARTH CATALOG



SOLID ROOF OVERHANG - FLAT AND PITCHED: effective primarily on South wall. Length of overhang can be calculated to eliminate summer sun's rays completely and to allow desirable winter rays to enter. Prevents free air movement. Darkens room on overcast days.

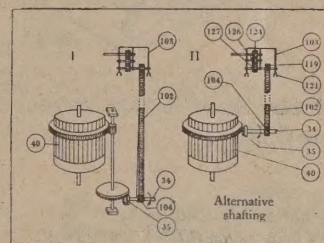
p.44

Science and Civilization in China, Volume IV, Part 2

is down from \$35.00 to \$32.50

from:
Cambridge University Press
510 North Avenue
New Rochelle, N. Y. 10801

or WHOLE EARTH CATALOG



p.31

Blasting

The pamphlets from the Institute of Makers of Explosives don't seem to be available for general use after all:

Pamphlet No. 21 "How to Destroy Explosives" is intended primarily for law enforcement officers and governmental agencies concerned with public safety.

If you have explosives that should be destroyed, it is suggested that you ask your local police department to get in touch with the nearest United States Army Ordnance Explosive Disposal Detachment.

- | | | |
|----|---|----------------|
| 11 | "Explosives in Agriculture" | Out of Stock |
| 17 | "Safety in the Transportation, Storage, Handling and Use of Explosives" | Under revision |



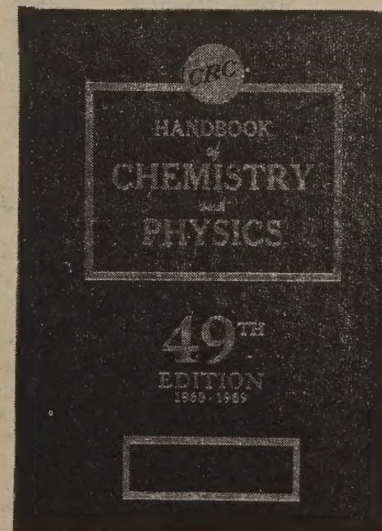
p.45

Handbook of Chemistry and Physics

was listed as being \$12.50; should be \$22.50 postpaid

from:
The Chemical Rubber Company
18901 Cranwood Parkway
Cleveland, Ohio 44128

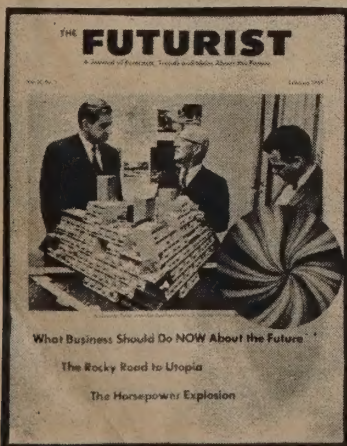
or WHOLE EARTH CATALOG



p.16

The Futurist was listed in our first printing as \$5.00. It is now \$7.50 for one year.

from:
World Future Society
P. O. Box 19285
20th Street Station
Washington, D. C. 20036



p.39

Solar Stills

The Sunwater Company has a new price list for their solar stills. Available from:

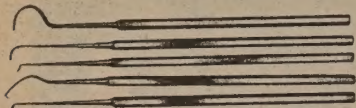
Sunwater Company
10404 San Diego Mission Road
San Diego, CA 92120

Corrections continued ...

p.46

Brookstone Tools has a new address:

Brookstone Company
Department C
3 Brookstone Building
Peterborough, New Hampshire 03458



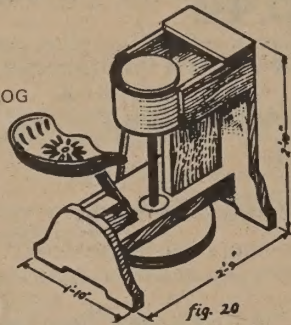
MICROPROBE SET SOLVES PROBLEMS FOR WORKERS IN MINIATURE

p.50

The Book of Country Crafts is out of print just now, but is being reprinted and will be available by Mid-April at a new price. Was \$4.95, will be \$5.95 postpaid

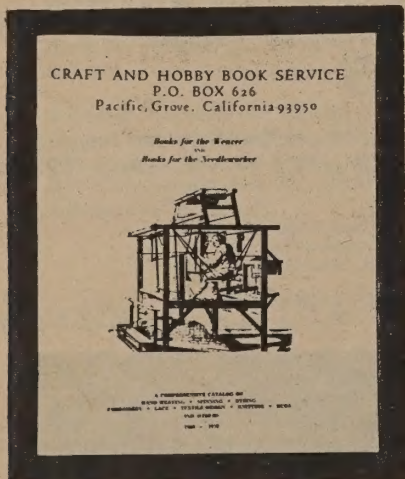
from:
A. S. Barnes & Co., Inc.
Box 421
Cranbury, N. J. 08512

or WHOLE EARTH CATALOG



The Craft and Hobby Book Service catalog formerly free, is now \$50.

from:
Craft and Hobby Book Service
Box 626
Pacific Grove, CA 93950



p.56

Indian Crafts and Lore is down from \$4.50 to \$3.95 postpaid. We had the source wrong too. It's from

Golden Press
Western Publishing Co.
1220 Mound Avenue
Racine, Wisconsin 53404

or WHOLE EARTH CATALOG



p.57

Classic Guitar Construction was \$5.95; now \$6.95 postpaid.

from:
E. P. Dutton
201 Park Avenue
New York, N. Y. 10003

or WHOLE EARTH CATALOG

New Science of Strong Materials is no longer available from either Walker & Co. or Shambala. You can still get it for \$1.35 postpaid.

from:
Blackwell's
Broad Street
Oxford, England

or WHOLE EARTH CATALOG

p.64

World of Mathematics is up from \$12.95 to \$14.95 postpaid

from:
Simon & Schuster, Inc.
630 Fifth Avenue
New York, N. Y. 10020

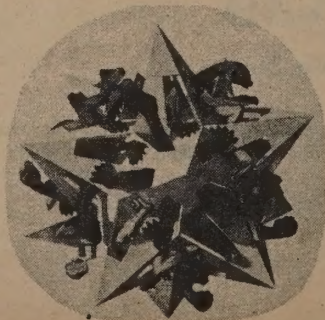
p.65

The Graphic Work of M. C. Escher has found yet another new home. It now comes from:

Hawthorn Books, Inc.
70 Fifth Avenue
New York, N. Y. 10011

or WHOLE EARTH CATALOG

It's still \$7.95 postpaid as far as we know.



p.67

The Handbook of Mathematical Functions is now available in paperback for \$4.50

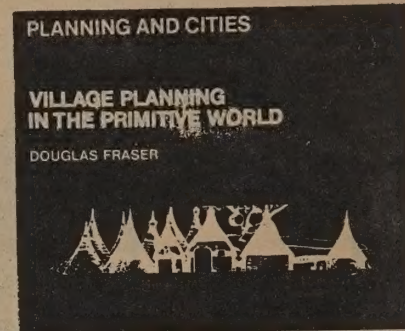
from:
Dover Publications, Inc.
180 Varick Street
New York, N. Y. 10014

p.92

Village Planning in the Primitive World was listed as being \$5.95. It's \$2.95 postpaid.

from:
George Braziller, Inc.
One Park Avenue
New York, N. Y. 10016

or WHOLE EARTH CATALOG



p.98

Light Weight Camping Equipment and How to Make it is no longer available from Gerry. You can get it for \$2.00 postpaid

from:
Alaska Sleeping Bag Company
710 N. W. Dawson Way
Beaverton, Oregon 97005

or WHOLE EARTH CATALOG

p.106

The New Science of Skin and Scuba Diving is up from \$2.45 to \$2.95 postpaid.

from:
Association Press
291 Broadway
New York, N. Y. 10007

or WHOLE EARTH CATALOG

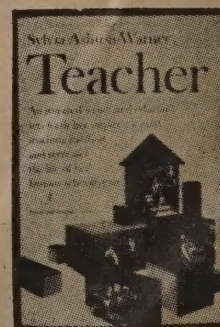


p.111

Teacher was \$1.95; is now \$2.45 postpaid.

from:
Simon & Schuster, Inc.
630 Fifth Avenue
New York, N. Y. 10020

or WHOLE EARTH CATALOG



p.54

The Complete Book of Progressive Knitting is up from \$5.95 to \$6.95 postpaid

from:
Liveright Publishing Co.
386 Park Avenue South
New York, N. Y. 10016

or WHOLE EARTH CATALOG

p.121

Using Libraries Effectively is up again, this time to \$2.75 postpaid.

from:
Dickenson Publishing Company
Belmont, CA 94002

or WHOLE EARTH CATALOG

Item-related Information

p. 5

The Subversive Science

On *The Subversive Science*, I'd say it's a dandy book for dipping into on the john or elsewhere. Each little piece is very thought-provoking. I've only read a few myself, but the first one on evolution of man is really nifty. Anyhow, from what I've seen, it's a bit too scattered to be a useful reference source.

Larry McCombs
Oakland, CA

p. 32

Seeds

About your listing for Clyde Robin's Seeds—you oughten't. One suspects that he's had them in his glove compartment since 1953. They have a *very* low germination rate. This is common experience among those of us who order those groovy things with the highest of hopes. Your friendly county agricultural agent can tell you where to get wildflower seeds to stop erosion or just to roll in.

S. Siegel
Fairfax, CA



Clyde Robin Replies

Thank you for including an advertisement for our catalogue in your *Whole Earth Catalogue*. We have received many orders for our catalogue through this advertisement. We are sure of this because you made a minor error in the advertisement carried in your catalogue in that you quoted it as selling for 25¢. Our catalogue sells for 50¢. It costs us 40¢ to print and 8¢ to mail. In future publications would you please correct this.

However, we have mailed catalogues to everyone who had ordered one through seeing your advertisement. And not only that, the catalogues which we mail are no longer effective but when our new catalogue is received from the printer shortly, each individual who was mailed an older catalogue will be mailed a new catalogue without charge.

Now as to this letter of which you sent me a copy. I do not understand the motive of the writer. The facts are that in 1969 we sold in excess of 12 tons of native seeds. More than 99.8 per cent of these seeds were collected in the year 1969. All our seeds are logged in each week by an agricultural inspector who sees them stored in a darkened storage facility which is heavily insulated and held at low temperatures so these seeds will retain all their viability. He has constantly complimented us in the fine and efficient manner in which we store and ship our seeds.

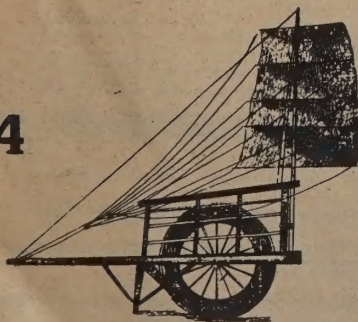
The major part of our business is from repeat orders and a goodly number of people have been with us since the early 50's with constantly increasing orders. We have received hundreds of letters of commendation from all parts of the world. To my knowledge this is the third letter of this nature we have received.

If there is any doubt in your mind regarding our operation, please contact us.

Sincerely,
Clyde Robin
Castro Valley, CA

We've been told that all wildflower seeds have a low germination rate. Comments?

p. 44



Science & Civilization

My favorite vol. of Needham (*Sci & Civ in China*) is Vol II which has the chapter on Taoism (not Vol I as you have it in the Fall 69 Catalogue) That chapter tells everything from how to perform coitus interruptus (haven't tried it but the directions are clear) to the origin of won ton soup (used to be an alchemical elixir)

Mark Engel
Ben Lomond, CA



p. 39

Dyna Technology: Electricity from the wind

You ask, "Has anyone used one?" Probably not with much success. I used to be an electrical engineer with a light & power company, then with an electric power magazine, until I dropped out. I've never used one of these gadgets, but have heard something about them, and they haven't made much of a reputation. Trouble isn't in their works, but in the wind, or lack of it. Wind, unlike flowing water, is an unreliable power source. It's dandy for pumping water up out of the earth because no farmer demands a steady stream (=amperes in electricity) at constant pressure (=voltage). Most of the time, in most places, winds are too weak to supply any but small power, and in that case you're better off with batteries. And even when the wind is strong, it's gusty, and that means uneven voltage unless the equipment has an extraordinarily good speed regulator. All of which goes a long way toward explaining why so few wind-driven electric generators are on the market—despite many an engineer's dream of such free electricity.

People in places so isolated that they can't get electricity from some power company or co-op are better off with generators driven by some kind of smog-making machine. Some handy man with a used-up VW whose engine still works might try putting together a VW-driven generator.

Electricity, by the way, even PG&E's, is really pretty cheap stuff. Compare it, frinstance, against the cost of fueling yourself at say 2000 Calories per diem, at \$1 a day for food. That's about 2½ kilowatt-hours of energy, for which an electric utility charges around 6¢. . . .

P. X (no telling where, 'cause I can't seem to relocate it in your index-less catalog; you really ought to add an alphabetic index): Comment on Teilhard de Chardin's "Phenomenon of Man" says something about his having written it in 1938 and "wasn't anyone listening?" Hardly, for this book (like all Teilhard's others) wasn't published until after he died in 1955. As mentioned in this book's introduction.

W. L. (Lank) Felsen
Stinson Beach, CA

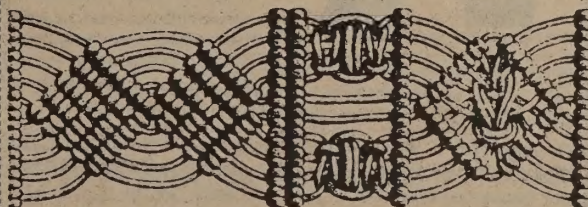
p. 54

Macramé

The macramé review in fall catalog is not what macramé deserves, I think. Instead of a book report, I'd like to turn people on—everyone I've ever taught macramé to has been so excited by it—both men and women—young craftspeople & old people too. and its possibilities are so unlimited out-of-sight.

Your review actually makes me angry—out of all the people I've taught no one has *ever* complained of "suffering through the tedium of learning a few basic knots". That's really thoughtless bullshit—making the sampler is really enjoyable and as exciting as all learning. I'm sorry you ever printed such a bumper.

Love,
Connie Feldsher
Feather Falls, CA



Virginia I. Harvey, author of *Macramé*, announces the new quarterly publication, *Threads in Action*, a technical publication on non-loom techniques. Macramé will be the principal subject with occasional articles on stitchery, bobbin lace, netting, knotless netting, sprang, knitting, crochet, and others.

Subscriptions are \$8.50 /year

from:
Threads in Action
Box 468
Freeland, Washington 98249

Individual copies are \$2.50, or \$3.25 with yellow vinyl cover.

[Suggested by Helen Bitan]

p. 55

Trouble Looms

To:
Northwest Looms
Box 241 Coburg, Oregon 97401

Copies to:
Craft & Hobby Book Service
Box 626 Pacific Grove, Cal. 93950

Whole Earth Catalog
Portola Institute
558 Santa Cruze, Menlo Park, Cal. 94025

Dear Sirs,

Over the last year or so my wife and I have developed an interest in weaving. We have been making our living by picking fruit and selling home made inkle looms and our inkle woven belts, hand bands, and hand bags.

After hearing about looms from other weavers we met in our travels, and reading your write-up in the *Whole Earth Catalog*, we decided to save our money to purchase one. We thought we could increase the variety of woven goods we have for sale and weave cloth for our own clothing. We decided that the widest loom, with the greatest possibility for variation of pattern, would be the best investment. This was the 20", 8 harness 'Craftsman', then advertised in the current *Whole Earth Catalog* for \$169.50. It was stated in the write-up that "no extra equipment is needed". In making our decision to purchase the loom we assumed that \$169.50 was all we needed to provide us with a machine that could weave wide lengths of cloth quickly enough to help provide for our living.

As soon as we had the money, I sent a check for \$169.50 with my order so we could get the loom as soon as possible. I mailed the check and order to Craft & Hobby Book Service on 11/28/69. Soon after that I received a note from them saying that they had referred the order to you at Northwest Looms. We then anxiously awaited the arrival of our loom, or some communication from you for nearly 7 weeks.

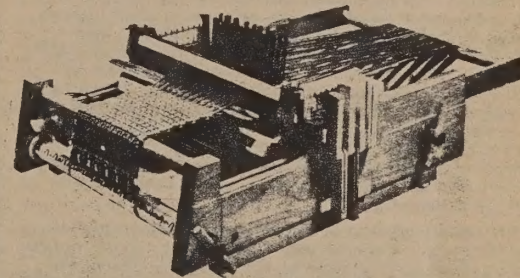
On 1/14/70 we received your "message" and accompanying information. We learned that—

1. The loom was not yet made.
2. The price had risen to \$183.50.
3. I might be interested in some of the "available accessories" (at extra cost).
4. "Looms and Accessories" were "shipped best way collect."

We also learned, but found it difficult to believe that you "try to ship within three weeks of receipt of order." and that "Payment in full with order speeds delivery."

We allowed ourselves a cooling off period before deciding what to do. After thinking, discussing, and waiting for 2 weeks, we have decided to ask that you send us our money back.

Karl D. Smiley
Hermosa Beach, Cal.



p. 64

Math

Some comments about your mathematics section—

I have no quarrel with *Mathematical Snapshots*, *Mathematical Models*, or the work of M. C. Escher, but I question the value, or at least the appropriateness, of your other two listings.

Newman's book is not a *tool*—except for high school students writing papers about Gauss, Archimedes, etc., and the teenyboppers don't need the Catalog to tell them how to use their school libraries. There are some good things in it: Hardy's *Apology*, the story by Aldous Huxley, the paper about being the right size, and some others. I bought it in high school and spent a lot of time with it. But now, seven years later, I have a degree in mathematics, and I think it (the book, not the degree) did more harm than good. Reading *about* mathematics is just like reading about music, without listening, playing, or composing. It's a waste of time, to say the least, and no one should be encouraged to do it.

The Russian survey isn't a tool either. The main problem with it, aside from its uneven quality, is this: either the reader knows calculus and linear algebra, or he doesn't. If he doesn't, then (a) this is not (absolutely not!) the place to learn, and (b) most of the book—differential equations, functional analysis, topology, etc.—will be unintelligible to him. (One exception would be the section on abstract algebra, which, I have to admit, is beautifully done and accessible to anyone.) On the other hand, if he does know calculus and linear algebra, there are so many better books on the advanced subjects that it would be silly to spend ten dollars for this survey.

(Of course if these books are *selling*, then my complaints are beside the point; but I suspect that they aren't among your faster-moving items. Right?) *Right.*

Lyle Burkhead
Los Altos, CA

The real reason I'm writing is about the hint on McBee Keysort—page 77 Fall '69, which is by far the most expensive system of its kind sold. If you're really stuck on keysorting, contact INDECKS, Arlington Vermont which can give you everything McBee does except that useless printer, for about FORTY DOLLARS LESS. (Whole starter set about \$12.00.) But actually, keysorting is a relatively inefficient hand-held deep index (which is what these systems are called by information theorists) for a number of reasons, all of which can be found in a very informative article by a Chemical Engineer, Ralph Cushing, in Chemical Engineering, Vol 70, No. 1, Jan 7, 1963: "Improving Personal Filing Systems". Cushing discusses his own system which I have found really helpful in organizing my materials on Japanese History—so its pretty flexible—its a "free key word syntactic concept coordination system" which beats the ass off McBee's alphanumeric subject system. Not only is the material accessible in a more natural manner, words and phrases as descriptors rather than numbers, but the system costs exactly NOTHING to make—a package of 3X5 and 5X8 blank index cards and you're in business. One drawback is that the system must be kept in order, but thats not really a drawback since the info is stored in order of accession, which makes it a real snap to correct indexing mistakes and to update the system—operations which are either prohibitively time consuming or impossible with keysort, depending on your informant.

Matt Greene
New York, N. Y.

From a Medical Student

I did, however, register a note of dismay at the listing of *The Handbook of Prescription Drugs*. Pharmacology, in case you have not yet looked it up, may be defined as the study of the preparation, actions, and uses of drugs. Thus, although I am only a grad student, I feel obliged to comment on this book. Strictly speaking, there is no such thing as a "generic equivalent." The term should be "chemical equivalent." Most drugs currently used are so potent that doses are less than half a gram. This means that the drug manufacturer is obliged to dilute drugs so that a dosage form may be of a convenient size. In addition, if the dosage form is a tablet (commonly, but incorrectly called "pills"), then, no matter what the dosage, various agents must be added which will allow the formation of a compressed tablet. The consequence of these added or adjuvant materials is that they often affect the efficacy of the dose of the drug.

An excellent case in point is aspirin. Most aspirin tablets contain 5 gr (300 mg) of aspirin. However, the actual tablet weight is several times this. This is due to the addition of diluents, binders, stabilizers, and disintegrators. Aspirin (acetylsalicylic acid) is a very unstable compound, and in itself, even in its purest form, is a severe irritant of mucosal tissue, such as is found in the stomach and intestines. It has been estimated that about a teaspoonful (5 ml. or 1/6 oz.) of blood is lost for each aspirin tablet ingested. However, this value is only for pure aspirin, and aspirin easily breaks down in the presence of moisture to acetic acid (vinegar) and salicylic acid (used for removing corns). By this time, it should be obvious that the care and skill with which a tablet or any medication is made and the extent of testing of the final product has a direct effect on the action of the product. Thus, when you open that bottle of cheap aspirin and smell the odor of vinegar, it is advisable only to dose your sewer system, unless, that is, you feel that you have a corn in your stomach that you would like to remove.

Another interesting case is one cited in the catalog, prednisone versus Meticorten. There are several cases reported in the medical literature where a patient received, not necessarily Meticorten, but a "brand name" prednisone while hospitalized, and then was discharged with a prescription written generically. It was found that several prednisone tablets made by "generic" manufacturers were considerably less effective than the ones previously dispensed.

There are efforts being made by the AMA, American Pharmaceutical Assoc., and the Federal Government, as well as the manufacturers, to develop standards for drugs. However, these standards, when available, are basic minimums. There is no way at present of insuring anything but basic physical similarity between two "generically equivalent" medications. Thus, two aspirin tablets may both meet the legal standard of disintegration in less than thirty minutes in a special apparatus, but one tablet may take 29 minutes, while the other takes ten seconds. I have seen this happen, and I ask you which tablet you think would release its ingredient faster for more rapid absorption and consequently more rapid action? The ten second tablet was Bayer, the other was a readily available, but very cheap product whose manufacturer I shall not name.

I would like to conclude this tirade by stating that there are instances where a generic drug will be similar in action to a branded drug and that merely the fact that a drug is given a brand name does not insure efficacy. Thus, the choice of the medication by a doctor should be tempered by his experience and his faith in the dispensing pharmacist to carry a reliable line of generic drugs, in addition to the ability or desire of the patient to receive the best possible medical care. Therefore, the blanket statement that a generic prescription will save you money, while generally true on a per dose basis, may not be true if it takes more of the cheaper medication to cure you.

As I see it, the solution to the problem at present from the patient's viewpoint is twofold. First, you must choose a doctor who is not an automaton and is thus capable of discussing with you the validity of a generic prescription in your specific instance. Secondly, you must choose a pharmacy which carries products from reliable lines, and not necessarily the cheapest stuff that is available. This entails, in most cases, finding a pharmacy where the practice of pharmacy is treated as a service, rather than a business. Unfortunately, neither is very easy, thus, the problem boils down to *caveat emptor*.

I would like to add, as a footnote, that most of us closely associated with drugs avoid taking them as much as possible.

Sincerely,
Craig K. Lewis
Nashville, Tenn.

Suppose you are aware that Meals for Millions no long distributes grit-type MPF but, instead, supplies a powdered form that is fine as a supplement or additive but useless as a basic food by itself.

There must be a lot of others like me who wish they would go back to distributing the grit grind.

George R. Barton
San Francisco

cc: Modern Protein Food
1800 Olympic Boulevard
Santa Monica, CA 90404

I have some information about Barbour Suits (p. 100, Fall '69 WEC). I have owned their heavyweight International Suit Jacket for 3 years now. (It is mostly motorcycle stuff, from my knowledge.) It is as waterproof as rubber, but on a hot day only a bit less sweaty than rubber. Mine is heavy woven cotton treated with some goo. I got an extra can of the goo for renewing the waterproofing when I bought the jacket but haven't needed it yet. This goo isn't sticky or anything, but it will rub off lightly on, e.g., another coat which rubs it a lot. And the jacket will start to have an interesting smell on hot days around about the 2nd summer you have it. I prefer the jacket to leather for bike riding. The pockets (designed to be worked with gloves on), the waterproofing & windproofing, and the protection are much better. I have dumped while wearing mine and it had no permanent scuffs, which leather won't do. It is not warm of itself as a lined leather jacket is, but I wear a sheepskin vest I made inside of it in winter when necessary (they sell one too). A sport coat fits comfortably under the jacket, when you have brought it properly—I wear mine to work (I teach just now). It is the standard for touring & general use for serious bike riders in Europe; worn for most competition except the road races. I have found you can wear it into a strange cycle shop (even if you don't ride a bike up) and be treated respectfully, even if you look a bit freaky otherwise, and I've had shop owners (like Moto-Guzzi M7 in 1967) apologize for not having bikes available for test driving at the moment, but if I'd care to make an appointment... They are very well made, and the fittings (brass) are beautiful. They are well designed for keeping out the weather, allowing for individual adjustment at the openings. I wear mine all the time, not just for riding, and it is the most comfortable 100% waterproof thing I've worn. After I've said all this, I must tell you I haven't worn the pants, however. (I guess my enthusiasm is obvious.)

I would like to suggest: "File Flosophy," a 49 page booklet about the different types of files & when and how to use them. It's information has helped me. It is FREE from the Nicholson File Company, Providence, R. I. (Their files are the best, too.)

Thomas Reynolds
Pittsburgh, PA



On page 100 (69 fall issue), you asked for more information on Barbour all-weather gear. Due to my husbands work, we have contacts with international competitors as well as week-end riders and here is what I have gleaned from them.—The suits are very well constructed (especially praised was the double-seaming technique). The windproofing is excellent. So is the waterproofing but, the oil-on-material method used to achieve this has drawbacks. It comes off on contact—hard on car seats and the duds of fellow passengers when riding a motorcycle. Also, they don't breath so

one is wet inside when its dry out and dry inside when its wet out. It was agreed that Barbour produces an excellent product but, that it is of very limited use.

On page 105, J. Baldwin mentions the E300 Honda generator. We bought one two years ago as a power source for lighting our converted school bus. It was in daily use for months on end for lights, Skillsaw, even a small iron (the iron caused it to labor a bit). It gives excellent performance. The noise isn't bad but, causes second thoughts in crowded campgrounds. It can be used to recharge a battery and if you have one, this is a service you will find yourself performing often, for yourself and others, when you live on the road.

For anyone interested in Indian arts and crafts, you can write to Publications, U.S. Dept. of the Interior, Indian Arts & Crafts Board, Room 4004, Wash., D.C. 20240, for fact sheets. We have fact sheets No. 1 and No. 2. I don't know if there are others. No. 1 lists sources from organizations (mostly reservation addresses and products available from each). No 2 lists sources from individuals (addresses of independent retail shops owned & operated by Indian or Eskimo designer-craftsmen and their products. If you wish to buy Indian made products you will find these fact sheets valuable mail order material.

Cynthia Barrow
Schenectady, N. Y.

No More Innovator

"Innovator" and "Free Trade" (Page 102) have been combined into a new publication called "Efficacy", \$2.00 a year, \$3.75 for two years, same address. Publication has narrowed to pure radical capitalism.

Donald E. Eastlake
Brookline, Mass.

Creative Playthings?

Just a note on one item:

Creative Playthings charming "Inquarium"

I made the creative mistake of purchasing it! My description: A true departure from conventional crib toys! Live fish swim before the infant's eyes for approx. 24 hours. Introduces him to the visual pleasure of watching fish die and floating to the top. Heavy vinyl leakproof pouch attaches securely to crib and contains iridescent nuggets. Fish not included. (We can't find any that will live!) 14 oz. RE 201 \$3.50

I wrote "Creative Playthings" and never received one word from them. All depends on one's definition of "creative" I guess!

Mrs. Thomas M. Dundon
Trenton, New Jersey



National Outdoor Leadership School

An Item I believe you should consider for your catalog is the National Outdoor Leadership School located in Lander, Wyoming.

It is different from the Outward Bound Schools you list in your catalog since it teaches skills for living in the mountain wilderness rather than using it as an obstacle course or training ground. . . . it teaches for the environment rather than through it.

While limited to the Wind River Range of Wyoming, NOLS provides a better background for those wanting to learn about the mountain wilderness than the Colorado or Northwest Outward Bound Schools do. I say this from experience, having worked as an instructor at both schools. For more information you should write to:

Mr. Paul Petzoldt, Director
National Outdoor Leadership School
Lander, Wyoming 82520

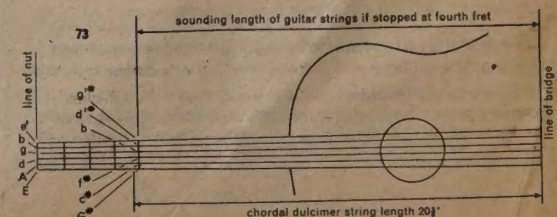
Sincerely,
Dave H. Williams
Lake Forest, Illinois

Dulcimers

Richard Bryan from Oakland says "Henry Steele Dulcimer (in supplement) is a piece of shit.

Made from 1/4" plywood, sounds something like a banjo & costs \$35.00.

Impossible to tune 'cause of fret pattern."



High School Underground Paper

Dear Friends,

Bob Freeston at CADRE said you might be listing the "How to Start a high school underground" pamphlet in your catalogue. [It was listed in January 70 \$1 Catalog] Could you please either say it either costs 6¢ (in stamp) or ask people to enclose money or stamps to help cover postage if they can. I hadn't expected the pamphlet to get around too much, but it's been mentioned in several places & the postage is really starting to hurt. (I'd rather you made the payment optional, like in the 2nd choice, if you can.)

In Peace & Liberation
John Schuller
530 N. Brainard Street
Naperville, Illinois 60540

Here Comes the Harley

On this general subject—reviewers liked Jawas & BMWs. OK, BUT, did you ever try to find metric tools in Peach Springs Ariz (you won't.) The answer is the elderly Harley Davidson, basically a piece of farm machinery & consequently very durable, repairable with standard American tools available everywhere—and generally easier to find parts for in the sticks than most other bikes. Pre-'58's have very low saddles, enabling short-legged girls to straddle them comfortably, a blow for women's liberation. You can find them cheap everywhere, (oh yes—also, you can put lots of weight on them & they'll still go, without wobbling) AND since they're hard to ride in the dirt they are less likely to wind up defacing the off-the-road spaces than small machines.

Stuart Allan
King City, CA

Starmaker

One note about *Star Maker*—I am deeply convinced that Stapledon was on the right track, that the universe he describes comes very close, via metaphor and myth, to something which must be analogous to the "real" universe. Imagine what a book he could have written had he known certain recent developments in astronomy.

- 1) stars with planets are probably much commoner than Stapledon supposes, and planets are formed, not by "chance meeting," but as part of the normal evolution of a star.
- 2) If, as Fred Hoyle has suggested, it is a property of space to generate hydrogen atoms, then the universe is in a "steady state." (i.e. it was the same, is the same, and ever shall be the same.) About one atom per cubic meter per million years would be enough to fill in the gaps left by the retreating galaxies.
- 3) If the universe which we inhabit is in a "steady state," then the cosmic mind already exists, all we have to do is plug in. Of course, it may be possible that only a minded world could "plug in" forever—but we know that individuals in lesser worlds do it occasionally.
- 4) It is possible that time is a line in the plane of eternity. It is also possible that time is a circle, in which case to say a thing happened once and to say it happened infinitely many times are equivalent. It is also possible that time is a spiral in which the same things happen over and over but on new levels—like taking a puzzle apart and fitting the pieces back together to find that you have a more beautiful picture. It is also possible that time is the intersection of two planes of eternity

Jenny Deupree
Davis, CA

In the Woods

We've been hitchhiking, living in woods, cities, just about always sleeping out for close to 2 years now. Very much into anything human, beautiful and combinations of these two. We have very much enjoyed catalog and want to go over with you some items in catalog and suggest some new ones.

Since we always camp and live out of kelly packs we have been interested in all books and equipment. I first would like to go over camping stores. We have been in most and know some thoroughly.

- 1) Camp and Trail Outfitters (in catalog)—I used to live in N.Y.C. and had down sleeping from them. The bags were fair but anyone who is a human being would have hard time dealing with old man who runs place. Definitely not a good place and definitely not "beloved" of anywhere. I can see how in past he might be put in for never were other stores with down equip. etc. Now that's changed. There is a store (actually it has been there at least 2 years but still is not known) Greenman's on Spring St. lower Manhattan. They have full range of camping equipment. Carry lots of stuff from Sierra Design. *Note!* have snowshoes made by "Snoecraft" in N. Y. State that have elastic type of plastic flat lacing instead of leather—much better. I haven't seen them any other place but could be wrong. Try to review them and please take out Camp and Trail—they are a dishonor to catalog.
- 2) Eddie Bauer (in catalog)—he is essentially a high-class sporting goods store for hunters, etc.. The only 2 things worth mentioning are the things you do—flotation suit (sounds and looks good—I don't know how good) and down equipment.

Potters Wheel

I read with interest the letters about Potters wheels in the Jan. Catalog. I'm not familiar with either the Soldner or the Klopfenstein wheels, but I make a kick wheel in Berkeley that I think is a very good deal. I've sold a number of them and had very good reports.

If you want to look at one or get references or more information please give me a call.

All the wheels have been sold locally, but I don't see any reason why I couldn't ship them anywhere.

SPECIFICATIONS:

FLYWHEEL: Reinforced concrete. 27 in. Dia.; 3.5 in. thick; 170 lb.

SHAFT: 1 in. Dia. Solid steel bar.

HEAD: 12 in. Dia.; .25 in. thick steel plate.

BEARINGS: Lower: Low friction sealed ball; Upper: Babbitt bushing

FRAME: Construction grade douglas fir; Seat and table: Exterior grade plywood.

DIMENSIONS: 44 in. long; 36 in. wide; 29 in. high.
Seat and table are detachable.

PRICE: \$80 at the factory. If delivery is required, the charge is \$5 plus 15 cents per mile both ways plus bridge tolls.

GUARANTEE: Free labor and parts at the factory for 2 years from date of purchase for defects due to normal use. For service calls you pay mileage and bridge tolls.

Paul Lipton
1624 Virginia Street
Berkeley, CA 94703
549-0368

The Environment Monthly

We are terse and expensive, true enough. Starting with our second year, in June, we will still be expensive but maybe a better buy. That is because I am importing some great kinds of people to write something called The Environment Monthly Necessary Papers. They will be issued from time to time, as they are forthcoming, to all of you regulars. John N. Cole, editor of the Maine Times and a throwback of a splendid environmentalist, will write the first Necessary Paper.

I forgot to tell you. For the last couple of months we have been offering Environment Monthly to students for \$12.50 a year, and wish it could be even less. We tell them we don't mind if they pass the hat in the dorm, either. Just so long as the subscriber of record is an honest-to-god student.

That's all for now.

Sincerely,

William Houseman
New York, N. Y.

The Environment Monthly

\$35/year

from:
The Environment Monthly
420 Lexington Avenue
New York, N. Y. 10017



From a Chemist

I think that in a few cases you are listing and recommending items that are completely unsuited to your readers and may even be dangerous. As a chemist I think that the Handbook of Chemistry and Physics is invaluable, but to a person untrained in chemistry and physics and who is not actually using these disciplines, the book would be almost a complete waste of money. And anyone who can use it already knows about it, so you are wasting space. The same arguments apply to the two Merk books but even more so because these could well be dangerous in the hands of an untrained person. These are *medical and pharmaceutical* references, meant for people who are trained to know the precautions that must be taken, and even they often make mistakes, as I'm sure you know. I am also sure some of your readers will think you are offering books on do-it-yourself medicine, and if so you may one day be responsible for someone's death.

Morton A. Klotz
Placerville, CA

Island Fantasy

Kieth D. Gilbert's *Island Fantasy in Depth* in the Jan. WEC is no doubt very salutary for combating stir-madness, but he overlooks some homely facts.

It is not easy to immigrate to Canada anymore. You must have a trade that is in high demand here. Or you can come as a visitor, get a job offer, then apply for landed immigrant status. But descend en-masse on the border saying you've come to set-up a commune on the Queen Charlottes, live off the land and apply for social assistance if you can't make it, and they will call up the militia. I will state flatly, it can't be done. The best bet for an individual might be to immigrate "properly" then join one of the Canadian communes already started. Maybe your group could sneak across the border or immigrate one at a time with forged apprenticeship papers as heavy duty equipment mechanics.

As for working on a fish-boat or even riding on one, forget it. Everyone aboard a fish boat must have a commercial license, usually be a union member. To get a license you must be able to prove you are a Canadian citizen or a British subject. It takes five years and a judge's approval to become a citizen. A landed immigrant is *not* a British subject.

Gilbert's racist remark is unfortunate. There are many blacks in Canada, possibly some on the Queen Charlottes. They have the same legal rights as anybody, whatever that's worth. I should imagine it is no more or less difficult to be a black among whites here than it is in the States.

And big dogs don't deal with bears, bears deal with big dogs. Carry a carbine.

Tom Tarr
N. Van., B.C.

The Canadian immigration department practically requires that a prospective immigrant have assurance of a job, evidenced by a letter from the employer, along with a bank statement (savings book, etc.) showing sufficient funds to support oneself and family for a year or so, a couple of thousand will do. Some folks have done this by borrowing such a sum, depositing it in a bank, getting a statement to that effect, then withdrawing the sum, returning it to the owner and retaining the bank statement for immigration purposes. Also, ownership of land is another point in your favor. Even a small parcel (a city-type lot) which are available cheaply through tax-land companies can help establish your sincerity in becoming a useful, purposive Canadian subject, which is what the immigration dept. wants.

—Tracy

ON BOOKS

I don't agree with your comparison bet. *Book of Survival* and *The Survival Book*. The later is truly romantic and limited for an American going into anywhere but still very good info, very exciting world facts and good follow up—but now to the *Book of Survival*. This also has good info but its chopped up style makes for very hard reading and low remembering. What happened to Bradford Angier's *How to Survive in the Woods*—a very good general primer—well written and very popular—did you have it and drop it? Also by Angier *Free for the Eating* and *More Free for the Eating*—very good reading books on edible parts of trees, flowers, plants, lichens with simple and gourmet recipes—easy to read. Example is Rock Tripe in *More Free*—fantastic nutritious food found in U.S. mountains and the North. I would even improve on his description but a vital food—could live on it for time—on it alone. We have found it in N. Y. S. adirondack Mts. and in Rocky Mts near Boulder. Am sure it's in Sierra??? Angier also wrote—with a doctor—book called *How to Become Your Own Wilderness Doctor*—good illustrations—good first aid book—not comprehensive like *Medicine for Mountaineering* (you have the booklet version in cat. why not also full book). Main point about Angier is that his books are very readable and let you absorb more real info.

That's all for now—

Please, if possible, give our love to Jay Baldwin and tell him we'll see him some day again we hope.

Stellios and Jessica
Boulder, Colo.

Latter is mainly a myth. His down equip is good but not near the best. Gives bad data for temp ranges and famous Everest jacket isn't worth the money, esp for the weight. Second best down jacket has cold seams which he says don't matter until -30 or -40. But if high wind? or emergency bivouac? I just don't believe it—maybe I'm wrong. Anyway at least don't recommend rest of catalog.

3) Holubar (Boulder, Colo.) (not in cat.) as good as Rec. Equip, Ski Hut, and better for a few things. We buy our down equip from them I think (although not positive with changing field) that they make best (and most expensive) sleeping bag in world—and down jacket easily on par with others if not better. We have both. Sleep. bag is for real winter camping. Cost \$150 + \$30 for liner and cover; has about 3½ lb. down and 135 down compartments. Well made and has down collar that pulls tight around shoulders—fantastic. Hoods also pulls around head—bag good for -50 - 60°. Have used our bags 6 out of 7 months we've had them in all too warm temp. —damp packing etc. and they still puff up fine when dried. All their down bags are good and can have collar added. If not for collar might seriously look at Sierra Design or Ski Hut bag but—still don't think as good. Bags weigh with liner and cover over 7 lbs—alot but in winter extreme cold, worth it. Coats are excellent with zipper and snaps and excellent hood. They *must* be in catalog.

4) Alp Sport (Boulder) (not in cat.) good place but not into them very much. Should review. Had their 4-man expd. tent. similar to one by Rec. Equip. but not too. We have Warmolite Stephenson tent so I'm biased.

New Suggestions

Hearth & Home ...

Amway, etc.

Dear Whoever Opens the Mail—

Re: \$1 W.E.C., p. 10, "Biodegradable" & "Eekological"

"Biodegradable" means breakdown into components.

52.5% of Amway Detergent is phosphate component.

Phosphate pollution over-fertilizes water. Algae prosper and consume water's oxygen. Plants and fish & eventually water, die. The fate of a dead body of water is a swamp. See d. a. levy: *Swamp Erie*, Alan Ginsberg: *Marsh Nations*, William Burroughs: *Putrid. Slime*.

The rest of this letter is the text of a Canadian Press release of early February.

TORONTO (CP)—Pollution Probe, a University of Toronto group, today released its findings of a study of detergents and their phosphate content as carried out at a U. of T. laboratory.

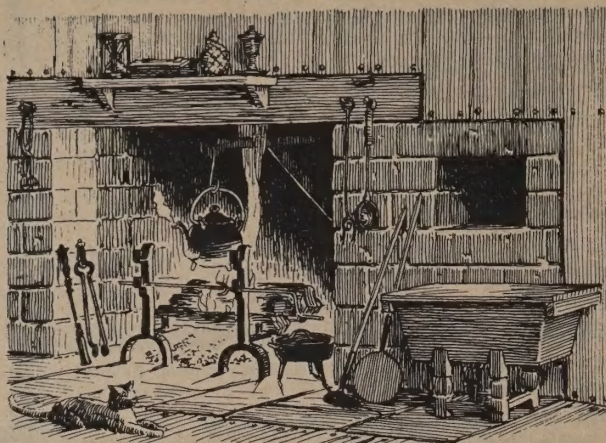
In a press release, the organization said the estimated error in the figures compiled in the laboratory and under the supervision of a chemical engineer, "was plus or minus 10 per cent of the figure shown."

"This," said the release, "means that if, for example, the figure is 40 per cent, we feel that the actual value could lie anywhere between 36 per cent and 44 per cent."

Following is a breakdown of the type of detergent, soap or cleaning agent, the manufacturer and the percentage of phosphates. Those products which have less than one per cent phosphate content are indicated with an x.

Manufacturer and Product	Percentage
HEAVY DUTY LAUNDRY DETERGENT	
Amway, Amway Trizyne	52.5
Colgate Palmolive, Bio-Ad	49
Sep-KO Chemicals, Pert	47
Procter & Gamble, Cheer	44.5
P & G, Oxydol	44.5
P & G, Tide XK	43.5
Lever Brothers, Drive	41.5
Lever Brothers, All	39
Colgate Palmolive, ABC	37.5
Lever Brothers, Sunlight	37
Amway, Amway SAB	36.5
Colgate Palmolive, Arctic Power	36.5
Colgate Palmolive, Ajax 2	36
Lever Brothers, Omo	35
P & G, Duz	35
P & G, Bold	32.5
Lever Brothers, Surf	32.5
" " " Breeze	32
" " " Amaze	27
Bestline Products Inc.,	
Bestline B7	27
Witco Chemical Co., Explore	26
Maleo Products Inc., Maleo	25
Lever Brothers, Wisk	10.5
LAUNDRY SOAPS	
Purex Corp, Instant Fels	9
Lever Brothers, Lux	x
Canada Packers,	
Maple Leaf Soap Flakes	x
P & G, Ivory Snow	x
AUTOMATIC DISHWASHER COMPOUNDS	
Lever Brothers, All	45
Economics Labs, Finish	43
Calgon, Calgonite	42
P & G, Cascade	36.5
Amway Corp., Amway	34
Curley Corp, Swish	29
LIGHT DUTY COMPOUNDS	
P & G, Dreft	34
Boyle Midway, Zero	7.5
Witco, Explore Liquid	x
Bestline Products Inc.,	
Bestline Liquid Conc.	x
Con-Stand Inc., Nutri Clean OLC	x
LIQUID DISH DETERGENTS	
All tested were less than one per cent.	
MISCELLANEOUS	
Calgon Water Softener	73.5
Amway, Amway Water Softener	73.5
Russel Chemical Co., Salvease	23
Harold Schafer Ltd.,	
Snowy Bleach	22.5
P & G, Spic & Span	21
P & G, Mr. Clean	6.5
Colgate Palmolive, Ajax	
All Purpose	6.5
Church & Dwight, Arm & Hammer	
Baking Soda	x
Bristol Meyers, Fleecy	x
" " " Vovex Bleach	x
" " " Whistle	x
Economics, Jet Spray	x
Noxzema, Lestoel	x
P & G, Downy	x
Purex Corp, Dutch Bleach	x
Bristol Meyers, Lawson's Borax	x
Cyanamid, Pinesol	x

Kind Regards,
Philip Kienholz
Enviroflow
Winnipeg, Manitoba
CANADA



Alconox

Enclosed is information about ALCONOX cleaning products. ALCONOX is entirely biodegradable. It is a scientific cleaner which is most often used in the laboratory, but ALCONOX is an outstanding household cleaner. Most important, ALCOJET is one of the few biodegradable, domestic, electric-dishwasher detergents made. Even Amway does not make a biodegradable detergent for mechanical dishwashers.

Brochure from Alconox, Inc., 215 Park Ave. South, N. Y., N. Y. 10003

Sincerely,
Jeffrey T. Atwood
W. Hartford, Conn.

Summerhill

I think that a very worthwhile addition to your section on education would be A.S. Neill's book *Summerhill*. Neill has probably been the major voice in the changing attitudes towards education and toward children and I think that many readers of your catalog would be interested in this book and enjoy it as I have. Enclosed is a short review and a selection of excerpts which I hope can give you and your readers the flavor of this book and of the man himself.

Summerhill—A Radical Approach to Child Rearing by A.S. Neill
Available from: Hart Publishing Co.
74 Fifth Avenue
New York, N. Y. 10011
Price—\$1.95

A. S. Neill is the pioneer in modern progressive education and he has written a revolutionary and perceptive analysis of childhood and the education of children. The founder of the famous and unique English school Summerhill, Neill has operated it for over forty years on one basic concept—freedom: freedom to be yourself, freedom to

More Birth Books

Nursing your Baby
by Karen Pryor
1963
Harper and Row. \$4.95

An excellent companion to *The Womanly Art of Breastfeeding*. I carried both with me almost constantly when I nursed our first son. They provide answers for most problem questions which arise and are indexed for quick searching. There are chapters on preparation for nursing and the philosophical and sociological concerns which affect nursing women and doctors in our culture, on physiology, and on the nutritional advantages of human milk. The later chapters cover the first 9 months of a baby's life and his nursing with a brief chapter on nursing the older baby.

"The separation of mother and child at birth is a physical and emotional shock to them both. Lactation permits this separation to be accomplished gradually, over at least a second nine-month period. Only gradually is the child parted from his old, uterine existence. When his mother feeds him long and often at her breast, his world still consists mainly of her warmth, support, and movements, her pulse, her voice, her body chemistry. He can acquire understanding of his new world of temperatures, textures, lights and sounds . . . from the familiar home base of her body."

"Becoming a father changes a man's position somewhat. He becomes the head of a household of three rather than the companion or mate of courting days. And in no place is his paternal guidance and strength more valuable than in the nursing relationship. The mother's ability to give her milk, and her love, to her baby is built upon the love and security that her husband gives to her."

"In what ways does human milk especially suit the human baby? In many, particularly as compared with the usual substitute, cow's milk. The milk of cows, and of ruminants generally, is designed for a very different animal, and is far more remote from our own than the milk of the wolf that is said to have nourished Romulus and Remus."

"Beer, which Dr. Kimball calls "the *sine qua non* for the nursing mother," has special advantages. The imported brands particularly are rich in B complex vitamins which may contribute to your energy and good humor, and which may be of specific value during lactation."

Shaklee

We've tried quite a few organic products (Amway, Naturclean etc)—and of all have found Shaklee's Basic H the best. It's biodegradable, non-toxic, non magnetic, non-irritating, non volatile.

The pH of Basic H is 6.5—the pH range of average human skin is between 6 & 7.

Uses: Windows, mirrors, floors, spot floors, walls, lavatories, wood work, tables, grills, vegetables, dishes, good for baths (even babies & pups) and really fantastic for washing your hair—leaves it shiney & soft, and stays cleaner longer since it's non-magnetic.

It will also remove gum from clothes; when added to cement it will spread smoother; wash leather jackets in it; records & jewelry can be washed safely—actually, anything that can be washed in water can be washed in basic H.

But the 2 most important things (I think) are it's non-polluting & non-toxic (safe around babies)

Shaklee also has a large line of other organic products—from cosmetics—if you're so inclined—to pet aids to vitamins & food supplements.

This can be bought only from authorized distributors—but you can get it wholesale by becoming a distributor (& maybe make a little bread if you feel like it.)

To become a distributor just write to me or

Shaklee Products
2035 National Avenue
P. O. Box 3625
Hayward, CA 94544

There is *no cost* or obligation when you do become a distributor. Really.

Merrie Van Der Wiel
Box 813
Columbia, CA 95310

either attend or refrain from attending classes, freedom to grow, and freedom to love. Freedom to do almost anything as long as you don't interfere with the rights of those around you. In this book, he has dealt with child rearing, sex, religion, children's problems, parents' problems, and with Summerhill itself and his feelings about growth and learning. Written by a man who has a great deal of love for children and faith in them, *Summerhill* is essential for an understanding of child rearing and education. Excerpts from the book—

"Summerhill is probably the happiest school in the world. We have no truants and seldom a case of homesickness. We very rarely have fights—quarrels, of course, but seldom have I seen a stand-up fight like the ones we used to have as boys."

"Summerhill might be defined as a school in which play is of the greatest importance. Why children and kittens play I do not know. I believe it is a matter of energy."

"We seem to be adapting our schools to this dullness in life. By compelling our students' attention to subjects which hold no interest for them, we, in effect, condition them for jobs they will not enjoy."

Smile and be beautiful,
Dick McLeese
Lincoln, Nebraska

Commonsense Childbirth

by Lester Dessez Hazell
1969. \$5.95
G. P. Putnam's Sons, New York.

Mrs. Hazell was horrified by her first hospital delivery and decided to educate herself about childbearing. She is now president of the International Childbirth Education Association and teaches expectant parents about family-centered childbirth. The book covers pregnancy (including nutrition), delivery, and the new baby, especially breast feeding. She has a mother's healthy respect for the primacy of the woman and her family in childbearing and the doctor's secondary role. A chapter called "What does it Feel Like to Have a Baby?" is very helpful.

"Soon I began to have the characteristic rasping in my breathing, indicating that I was almost ready to begin pushing. I tried a tentative push, and it hurt, so I was not quite ready. After the next contraction, I felt a real need to push, and I did, bringing the baby's head into view. I was very busy, but I could hear my sister's "Oh, oh, by goodness!" in tones of wonder and excitement. Suddenly I felt the stretching sensation which meant I should no longer push; I broke into a pant instead until the contraction passed, and the baby's head was born . . . The next contraction brought the whole baby, who gave a good cry . . . She was very strong, very substantial, and was looking all around I held her . . . while her cord was being cut. Then my husband wrapped her in a pink blanket, and I took her in the crook of my arm. She obviously wanted to nurse, and it was easy to oblige . . . We settled for the night, and I slept very deeply. At dawn I awoke, and there were all my friends still sleeping in chairs around the room."

"It is also my conviction that the major supporting role during pregnancy, labor, and delivery goes to the husband. It is at this time that the whole framework is laid down for his relationship to his wife as the father of their children."

"Bottle feeding is a symptom of our present psychological set in which we are afraid to make a deep personal investment in anything, including our children. It somehow seems safer to trust our babies to the science of a formula than to the miracle of the milk of human kindness."

Judith Baggs
Groveland, Mass.

Children of the World



As an old children's book buff (I grew up in a family of four kids in which we read aloud every evening, and have a heavy-reading bunch of four kids myself) I feel moved to respond to your San Diego correspondent who in the January issue asks for "any sort of literature for our kids that doesn't constitute total propaganda for the establishment set." First, though, I'd have to say that I don't think it is possible to do very well on her specific request for stuff on families other than the Standard American model, since the books on "other kinds" of families (eg Reba Mirsky's *Thirty-One Brothers and Sisters*, Lois Lenski's stories about Okies and such) which are available and often not bad are written by people who are outsiders to the life they write about and have that flat and faintly didactic quality which goes with that. There are some autobiographies from other cultures which I remember liking (Youel B. Mirza, *Children of the Rooftops*, Younghill Kang, *The Happy Grove*, Mme Sugimoto, *A Daughter of the Samurais*, Camara Laye, *The Dark Child*, Wright's *Black Boy*) but none of the ones I think of are for young children. I'd imagine that the main thing she wants and what we generally want is something which encourages kids to be open and to grow into the kinds of grown-ups who can laugh and cry and wonder. Now having, as is customary, re-defined the question to suit the answer I have, I will make some suggestions along those lines. Just things which come to mind.

If my list has an idiosyncratic character, so would any child's. For kids not only have their individual tastes but also use particular books for some particular thing in that book which speaks to their particular condition. One of mine, for example, loved a book by Robert McCloskey called *Blueberries for Sal* which is about a bear mother and child and human mother and child getting scrambled and then brought back together properly again, and at a time of great stress (she'd had to have part of a finger sewed back on) had it read over and over. She would wake at night crying, and I would hit her with the *Blueberries for Sal*, and she'd go back to sleep comforted. Also, kids, like grown-ups, like from time to time to rest or rot their minds with trash.

Anyway, some suggestions.

First, for pretty young kids:

Ruth Krauss' *Bears* is perfect play, and her book *The Big World and the Little House* is a beautiful statement about being at home in the world.

Antonio Frasconi's multi-lingual woodblock picture books *See and Say* and *More See and Say* are extraordinary, and even nicer is *The Snow and the Sun*.

The tiny, precise books by Beatrix Potter may seem too old-fashioned to parents who think of themselves as advanced, but I think should be looked at. The best known is of course *The Story of Peter Rabbit* but some others are more interesting. I like especially *The Tailor of*

Gloucester. (Beatrix Potter was a terribly cooped-up Victorian clergyman's daughter who wrote and illustrated these stories to keep alive; late in life she married, happily, and never wrote another line. Women's Lib take note.)

Maurice Sendak's *Where the Wild Things Are* is preferred by the Cambridge types.

I'm not sure if you can get in the U. S. Tove Jansson's *The Book About Moomin, Mymble and Little My*, but if you can get it you'll be amazed: Finnish surrealism.

Dr. Seuss, as is well known, writes splendid nonsense; for me, the one which comes off best is *If I Ran the Circus*.

For somewhat older children:

All the books by Laura Ingalls Wilder are wonderful. They should probably be read more or less in order, not only because they follow the chronology of her own life (they are autobiography) but because the scale of vision in each is that of the age level represented. The first one, *The Little House in the Big Woods*, is in its own way a sort of child's Whole Earth thing anyhow, full of careful descriptions of such things as how to make a smoke house and smoke meat in it and how to make a wood-and-leather door latch. My favorite of the lot is *The Little House on the Prairie*; the chapter in that on "Indians Going Away" is for me one of the most perfect pieces of writing in English for any audience.

E. B. White's *Charlotte's Web* is a wonderful book about the basic things—friendship, death and birth.

Randall Jarrell's *The Bat Poet* is a fine book about being a poet and has some great bat poetry; his *The Animal Family* is also the real stuff.

Saint Exupery's *The Little Prince* one might think is really for grown-ups, but my kids like it.

P. S. Beagle, *The Last Unicorn*. So sad.

Tolkien, of course.

Three books which we have loved which might not go for kids who don't know New York, are Jean Merrill's *The Pushcart War* (guerilla warfare against trucks) Doris Plenn's *The Green Song* (about being a Puerto Rican, in this case a frog, in New York) and George Selden's *The Cricket in Times Square* (on being alive at all in New York.)

Two very old-fashioned books which might or might not go for some kids in this age are Frances Hodgson Burnett's *The Secret Garden* which is about a couple of terribly neurotic kids growing into health by working together to make a garden come back to life, and George MacDonald's *At the Back of the North Wind* which is a terribly strange book, I guess metaphorically about death.

Selma Lagerlof's *The Wonderful Adventures of Nils*; travelling around Scandinavia with a flock of wild geese.

Some children like fairy stories and some don't. Those who do usually need a big supply; readily available in paper are the red, blue, pink etc. fairy books. The stories of Hans Andersen are usually listed as fairy stories, but of course they are something else than "tales."

Then there are the Homeric epics. For kids I like best the Giant Golden Book of the Iliad and the Odyssey. I have burst into tears reading aloud the Iliad to a little boy who was mystified (and re-reading Simone Weill's "The Iliad: The Poem of Force" knew why it made me cry.)

Some really good collections of poetry are: Herbert Read's *This Way Delight*; Dunning (ed) *Reflections on a Gift of Watermelon Pickle* (can be got in paper, but the photographic illustrations are so good the hard cover is worth it if you can afford it) and C. F. Moule's *Miracles* (poems by children.) Carl Sandburg's poems, *Wind Song* can be got in paper.

Having listed all this fantasy, I would like to cite also one very good book about fact: Mary Elting's *The Lollypop Factory and Lots of Others* which is about industrial organization, written in a nice nonsense style like those old books by Ilin. There is a Giant Golden Encyclopaedia which doesn't tell you much about anything, but is the sort of thing it is fun to browse through.

I'd also like to list one stunning biography available in paper, which I have been giving away to friends of mine: *Journey Towards Freedom: The Story of Sojourner Truth* by Jacqueline Bernard.

If you are far from libraries or bookstores, Blackwell's in Oxford has a splendid children's book catalog, and the price of books in England is so reasonable that even with postage it may be cheaper than here; they are very obliging about letting you set up an account rather than paying for each order. If you write them they will reply (or have to me) via a handwritten letter.

Now for another department. If you are going to list books on such finicky crafts as macrame, I think you should list *Cookies and Breads: The Baker's Art* by Ilse Johnson and Nika Standen Hazelton, Reinhold Publishing Corp., \$6.95. Most of it consists of photographs of items in an exhibition of ornamental breads and cookies at the Museum of Contemporary Crafts, but it also has some how-to directions and we went absolutely wild here one Saturday making instant stained-glass with cookie dough and pounded-up sourballs.

I was rendered absolutely euphoric by your review of my book, *The View from the Barrio*, in the fall issue. Such a contrast to the *American Anthropologist*. They sort of liked it, but were made very uneasy by the lack of footnotes.

Loyally,

Lisa R. Peattie
Newton, Mass.



Son of Brown Rice

I think it would be good for catalog readers to know where to buy Koda Brothers brown rice—by far the best grown in the U. S. and costing only \$12.20 per hundred pounds. We use only this brand at Tassajara: The only 4 distributors are:

Nomura and Co.
429 Beale Street
S.F., Calif. 94105

Mutual Trading Co.
431 Crocker Street
L. A., Calif. 90013

Sol Rabinowitz
P.O. Box 837
Jamaica, N. Y. 11431

Erewhon
342 Newbury Street
Boston, Mass. 02115

or
8003 Beverly Blvd.
Los Angeles, CA 90048

Take Care,
Bill Shurtleff
Zen Mountain Center
Carmel Valley, Calif.

Sprouts and Sea Fare

Cultivation of bean sprouts (those wormy things in chow mein are sprouts) is an enjoyable & cheap way to add valuable vitamins and minerals to your diet. You can rig up a sprouter yourself with a glass dish, rack & towel and sprout beans sold at Health Food Stores.

The best source on sprouting I know is *Tested Recipes from El Molino Kitchens*—recipe No. 850. It would be very groovy for kids to get into growing these miniature sprout gardens. They can learn about plant growth and at the same time cultivate a worthwhile food. I've experimented with sprouts and found out at least 2 things: 1) don't drown the beans in water. 2) keep temp constant. I've lost 2 crops because of cold snaps (my house does not have central heat.)

New Cruising Cookbook, by Russel K. Jones and C. McKim Norton. W. W. Norton Co., Inc., NYC 1960, \$5.95 (list price from Sailing Book Service)

This is a book for sea going nomads who don't want to learn about galleys (sea kitchens) the hard way. It's frustrating to try to adapt land cooking techniques to the galley when your ship is wallowing in heavy seas.

This book gives complete information on galleys (stoves-fuels-gear), advice on stowage and sample lists of supplies & provisions.

The second part of the book deals with recipes for a 2 burner galley stove, serving 4 people. Recipes are divided into food headings (meat, vegetables, eggs). Each recipe includes cooking time and complete details.

I feel this book is necessary to those getting involved with the sea going scene because it is important to realize the necessity for good cooking at sea. Crudely eating habits don't make it while cruising. It's also important that everyone on board can take a turn at cooking. It's a drag being stuck below in a galley for an entire cruise.

Isabel Snizak
Upper Key Largo, Florida

D. Mayerson Suggests

Equipment: No matter what kind of cooking you do, French cookware is unsurpassed both from a scientific and aesthetic pt of view. E.G. Pots are 1/8 in thick copper, tin lined Why: High heat conductivity (little heat wasted in heating the pot compared to iron, even heating (no burning on the edges like aluminum) Good enthalpy (keeps warm for a while after cooking etc. Mail sources (sorry these all E. coast) La Cuisiniere, 903 Madison Ave. NY, NY 10021. Bazaar de La Cuisine Inc. 160 E 55th St. NY, NY 10022; Basar Francais, 666 6th Ave. NY, NY 10010 All three shops issue free catalogs.

Surprised that with your emphasis on self-education, you don't have 10 pages on correspondence schools. You learn at your own pace, the schools take all the work out of separating the wheat from the chaff in any field. The teacher knows you by name. Etc. A possible good first entry: National Camera Repair School 2000 W. Union Ave. Englewood Colo 80110 Also: ICS, Scranton PA 18515 Over 400 courses including a lot on construction which WEC'ers seem to be interested. The accrediting agency of correspondence schools is National Home Study Council 1601 18th St NW, Washington DC 20009 It issues a free list of accredited schools

D. Mayerson
Flushing, NY 11355



About Tea, Coffee, & Spices

I SUGGEST:

About Tea, Coffee & Spices by John A. Murchie (catalog)
FREE from:
Murchie's
1008 Robson Street
Vancouver 105, B.C.

REVIEW:

That tea is useful and relevant to education is beyond doubt. If its good tea. This delightful mail-order catalog list a variety of teas, coffees, & spices. I've been drinking their tea for years and can swear to the following: IT's quality is better than the "gift teas" (Ming, Spice Islands, etc.) which come in fancy boxes and run about \$5/lb or so. And their prices are better: \$2.50/lb for the highest grade of most teas (plus some postage) Their service is good. Tea arrives in Portland in less than a week. I haven't tried their coffee or spices. It's refreshing to see somebody keep a family tradition (since 1894) of quality.

SHORTER REVIEW:

Good tea at a good price. Good service.

In the Name of the Earth
Peter Dvorak
for the Free Underground
Portland, Oregon.

Yeast

for M/M Peter Ruppell
Hearst, Ontario

who inquired about making yeast for bread in the Jan. Catalog

2 oz hops
4 qts water
1/2 cup salt
6 med. potatoes
1 qt flour
1/2 cup brown sugar

(Takes 4 days) Boil hops in the water for 1/2 hr. Strain & cool to lukewarm. Place in earthen bowl, add salt & brown sugar. Mix flour with part of the liquor then add the remainder. Let this stand until 3rd day. On 3rd day add potatoes which have been boiled & mashed fine.

Let stand a day, strain & bottle. The mixture should be stirred frequently & kept warm throughout this process.

After the fermented mix has been tightly bottled, stored in refrigerator or cool place, it will keep about 2 mos. Shake mix before using—allow 1/2 cup mix for one commercial cake or pkg of yeast.

1 DAY METHOD

Add 1 qt water to 1 pt hops. Simmer 20 min. Add cornmeal until of thick mush texture. When cool, work more corn meal in & pat into cakes. Dry & store.

These are from *Rare Recipes & Budget Savers*, a compilation from a Wichita Ks paper column, "Home Town News." It has a lot of funky homespun items like Root Beer, Shoo Fly Pie, Hand care for cement workers, Curing feathers for hats, etc. \$1 from Wichita Eagle & Beacon Home Town News, 825 East Douglas, Wichita, Kansas.

Sherry
Oakland, CA

Acorn Meal

Dear Friends:

In the seven years we have been running our little commune for two here in Geyserville, we have been great friends of Gibbon's Stalking the Wild Asparagus Book . . .

If you have readers who have worked with acorns and have made Gibbon's acorn meal, we have been doing this for four years now and have found by experience the following information which could be useful to those just experiencing the richness of acorns. The valley oak, or what locals up here in Sonoma County call the mush oak (it is large and deciduous), produces a much larger acorn than the native evergreen oaks, is much easier to shell, and contains less acids to leach out. We go through one leaching process with the mush oak acorns where as the live oak acorns require up to three leaches to eliminate the tannic acids, the bitter-ness. We have never tried other acorns, and certainly would swap acorns next fall with any others you may hear from.

Thanking you . . . and with a welcome if you ever get up to these parts of Sonoma, we send warm feelings.

Love,
Jim and Bitte Miller
Geyserville, CA

All you farmers-to-be

Penn State is Number One, at least in correspondence courses that have relevance to agriculture. Cornell University recommended them to me and am I glad. All the courses have "x" pages of written material followed by a "test" that is "graded" by someone in State College (if you desire) and returned. Naturally, with so many courses, the quality is varied. I've read maybe two dozen of them. They are extreme valuable in areas where the reader has absolutely no knowledge. The Penn State introduction obtained with no small degree of authority enables one to more intelligently choose more advanced material (which is not always necessary) without waste of too much time and money in shotgun searches through libraries and/or bookstores. I recommend particularly their survey on Poultry Keeping.

Be well.

John E. Schultz
Mileses, New York

Catalog FREE from:

Correspondence Courses
The Pennsylvania State University
202 Agricultural Education Building
University Park, PA 16802

97. FARM MANAGEMENT. This course covers the field of farm management in general terms. It is useful to the nonfarmer who wants to improve his understanding of the business of farming; to the beginning farmer as an outline of knowledge he should have and as an efficient approach to farm management; to the farmer as a review and summary. *8 Lessons, 10 Study Points*

103. POTATO GROWING. Eight lessons provide information on factors concerned with potato production. History and importance of the potato on a worldwide basis are explained. The present-day varieties to use are described, as well as the various steps in growing and marketing the crop. The uses and food value of the tubers are discussed and also how to store and care for seed and eating tubers. *8 Lessons, 11 Study Points*

105. DAIRY GOATS. These lessons treat the origin, characteristics, and adaptation of the breeds of milk goats. Breeding and feeding are fully covered, and special attention is given to care and management. Excellent illustrations of equipment and housing are enclosed. *8 Lessons, 10 Study Points*

How to Identify Plants

I would like to suggest *How to Identify Plants* by H. D. Harrington. Swallow Press, Chicago, 1957. \$2.25 (paper-back) for the catalog. I've just discovered it—with glee for it seems to offer a do-it-yourself way into the technicalities of plant identification. It offers a concise explanation of how plants are classified, reasoning behind terminology, definition of important terms (several chapters of this) with drawings, guide to using keys in identification, the techniques & equipment of collecting and pressing, lists manuals for specific areas & includes an illustrated glossary.

Janet Inada
Ashland, Ore.

Indoor Greenery

For those who are still in the city but are attempting an indoor green revolution to freshen air, eyes and soul, may I suggest the following sources of info., plants and materials:

The really best book on "how to" is Ernesta Drinker Ballard's *A Garden in Your House*, Harper & Row. An excellent & unusual feature of this book is that it contains lists of plants especially suited to specific indoor environments.

Indoor plants by mail:

Logee's Greenhouses, Danielson, Conn.
Catalog \$50. 39 p of Begonias, 9 of geraniums, lots of herbs.

Merry Gardens, Camden Maine 04843
Handbook & price-list \$50. Gives cultural requirements for each plant or plant type. Offers a wide variety of plants—and specially wide variety of fuschia, begonias, scented geraniums and herbs. They also sell herb seeds.

Julius Roehrs Co., Rutherford, N.J. 07070
Exotic Plant Collectors list \$25
These are really groovy & unusual plants from one of the largest greenhouse complexes in the US. It's worth a visit if you're anywhere near NYC—NJ side of Lincoln Tunnel on Patterson Ave.. This is the only source of "specimen size" plants by mail I know of. Most deal in plants in 2"-3" pots which are easiest to ship—and relatively inexpensive to acquire.

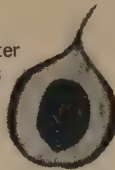
Materials & supplies—particularly for growing things under lights
House Plant Corner
PO Box 810
Oxford, Maryland 21654
Catalog \$.20 the 1st time.

Peace & Strength
Libby J. Goldstein
Philadelphia, PA

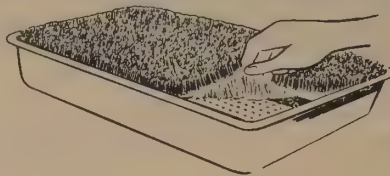
Seeds

I have had pretty good luck with the Gurney Seed & Nursery Co people. As you see the photographs and reproductions aren't as good as Park's. Their service and quality of product has been good.

Sincerely,
Edward Pfister
Austin, Texas



Gurney Seed & Nursery Co., Inc.
Yankton, S. D. 57078
Flowers, vegetables, trees



More Seeds

KITAZAWA SEED CO.
A 356 W. Taylor St.
San Jose, Calif. 95110

	Pkt.	Lb.
CHINESE CABBAGE Aichi Hakusai. Plant in July-Aug. Has 10-12 lb. head	.50	5.00
Nozaki No. 4. Spring sowing, slow bolting	1.00	8.00
EDIBLE BURDOCK (Gobo) Japanese specialty resembling Scorzonera in shape. Roots long & slender are washed, scraped, scalded and boiled until tender & tasty. Seed used for its medicinal properties also	.50	5.00
MUSTARD SPINACH (Komatsuna) Quick growing tender dark green glossy leaves used in salads having a flavor of mustard & spinach	.50	
JAPANESE ONION, Nebuka Transplanted plants with earthed up stalks grow thick with pure white blanched stems	.50	

(Suggested by R. Ruiz,
Santa Cruz, CA)

David Pace

One of the largest, for-real suppliers of organic fertilizers, soil conditioners, & natural insect controls. They probably have everything you'll ever need, and then some, to grow your own good food. Their catalog is free from David Pace, 924 Olmstead St., San Francisco, CA 94134

BLOOD MEAL is most popular as excellent source of organic Nitrogen, the growth promoter (over 12%). It goes to work more quickly than most organic materials, will not burn plants.

COTTONSEED MEAL contains all three major plant nutrients; Nitrogen, Phosphorous and Potash.

KELP MEAL is unsurpassed as a soil conditioner and a source of every important trace element. Kelp has been used almost as long as man has existed, stimulates growth of plants in such a way that improvement is made in the quality of the produce. Kelp aids plants in the uptake of necessary nutrients. Only a very small amount is needed.

Working With Glass

There aren't many books on working with glass. W.E.C. lists only one and that is mostly about glass blowing. May I recommend: "The Encyclopedia of Working With Glass", Milton K. Berlye, 1968. Oceana Publications, Inc. Dobbs Ferry, N. Y. \$12.50. It covers the entire subject very well, including fiberglass.

A. W. Griffin
Van Nuys, CA

Alaskan Camp Book

The Alaskan Camp Cook \$2.00
Alaskan Sportsman Magazine, Box 1271, Juneau, Alaska

This is a collection of recipes for preparing game including moose, beaver, mountain sheep, etc; for preparing fish, shellfish & for gathering & cooking wild fruits, berries & vegetables. There is also a section on sourdough cookery. Apparently the Home Economics Dept. of the U of Alaska is also a good source of wilderness cooking advice.

Peace & Love,
Lee Miller
Seattle, Wash.

Woman's Day Co-op

I have a few things I would like to suggest.

1) WOMAN'S DAY MAGAZINE. Obviously, every issue of this supermarket magazine isn't great but if you keep an eye on it they occasionally give you really good information on how to make things. In contrast to say Family Circle and McCall's, which are really plastic and suburban, Woman's Day will give you instructions and patterns for things like patchwork quilts. I think they once even had instructions for making the "molas" made by the San Blas Indians. In other words, their craft department is really good.

2) Co-op Low Cost Cook Book: (That's the Berkeley Co-op) I am always trying out new recipes, especially in the low-cost field. This little book is the best I've ever found. Everything tastes good, is easy, nutritious and cheap.

Serena Embree
Sebastopol, CA

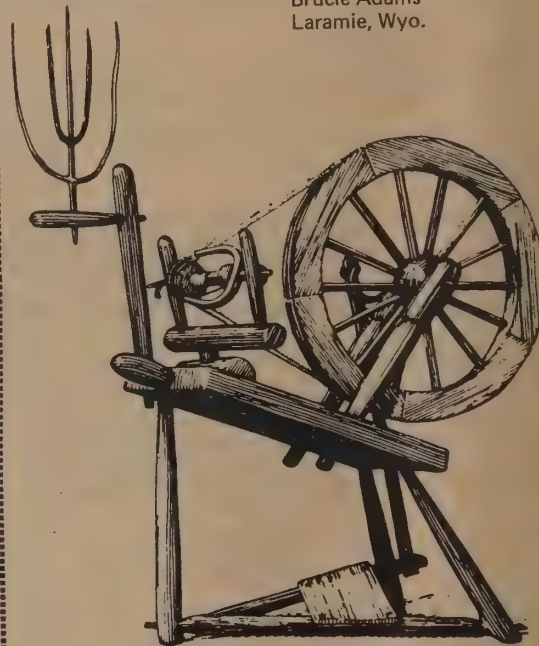
Spinning Wheels

about \$45

from Made-Well Manufac.
Sifton, Manitoba, Canada

The wheel is the "box or chair" type. This wheel is only sold complete. Postage & duty on mine came to about \$12. (This would be true of Indian wheel too) But the total is less than the Indian wheel by quite a bit. Mine works fine. This firm also sells a great carding machine that saves hours if one is starting with a raw fleece. This is \$43, shipping & duty about \$5.

Brucie Adams
Laramie, Wyo.



Violet Jelly!

A really nice way to preserve a bit of spring for the whole year is to make violet jelly. Here's my recipe:

2 cups of freshly picked violets (flowers only)
1 cup boiling water
juice of one lemon
½ cup, or thereabouts, of sugar
pectin

Put the violets and boiling water in a blender and blend till the flowers disappear. It'll be greenish-black and look terrible.

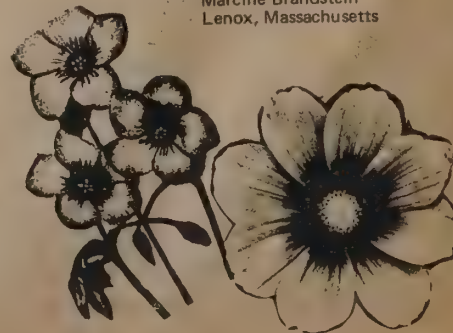
Pour into a heavy saucepan and boil—a greenish scum will form which must be skimmed off. When there is no more scum, add sugar to the boiling mixture and stir with wooden spoon. Add lemon juice (this makes the mixture turn a beautiful purple).

Add the pectin (about 1/3 the pkg) and boil for about 3 minutes more. Pour into sterile jars and seal.

Let sit for about a day without disturbance. The jelly will never be solid but rather like soft jello.

Red clover flowers can be substituted for violets, and I think phlox flowers might also work. Two people can pick about a gallon of flowers in about an hour. (2 cups of flowers make a little less than one pint of jelly)

Marcie Brandstein
Lenox, Massachusetts



Creative Casting

CREATIVE CASTING, by Sharr Choate. \$6.95 from Crown Publishers, Inc. 419 Park Avenue South, New York, N. Y. 10016

This book provides a detailed, coherent description of the tools and processes involved in casting jewelry, holloware (silverware), and sculpture. It covers casting techniques for lost wax, replica, hollow-core, sand, cuttlefish bone, and rubber mold methods. It explains exactly how the materials are treated and why, and liberally illustrates each step with diagrams (over 400) and color plates (13—and they are beautiful).

The first part of the book covers designing the model, preparation for casting, and casting. The second part deals with the finishing, soldering, treatment and surface decoration, gemstone mounting and findings, electroplating and enameling. *Creative Casting* is comprehensive: it includes all the technical information available from research by dentists, industrial casting engineers, and professional jewelry craftsmen. Yet it is not difficult to understand. The instructions are precise and many, but carefully laid out. The center section of photographs of jewelry, silverware, and sculpture suggests a lot of interesting possibilities to work in metal, once you've got the technicalities well in hand. This is a book to underline, dog-ear, and store along with all of your best metalworking tools.

Susan Williston
Portland, Oregon

Gladney Oakley Suggests

You'll stop singing the Nothing-can-be-done Because-the-technology-is-secret-blues when you get ahold of this book.

Chemical Process Industries, by Norris Shreve. McGraw Hill; 2956, 886 pp.

Outlines of hundreds of industrial processes are detailed here. Tan leather, make glass, cement, alcohol, soap, paint, glues. One hang: these processes are all described on the full industrial scale, you will have to scale them down to suit your own enterprise.

What this book doesn't show is the waste products from each process. It would be a service for some industrial chemist to team with an ecologist and add to every process listed the amounts and types of waste products produced, and to catalogue the current methods of disposing of these, for it is these processes which yield not only beer and tanned leather and pretty glass beads but the pollutants which we live in.

What we all need is a book in which a sensible, organic, good-cycling-way of disposing of each and every waste product we produce from whatever process is described.

There are three schools of compost making, the common USA-UK variety exemplified in this country by the authors writing for the magazine *Organic Farming* and collected in the encyclopedic work by the editor of that magazine, entitled *The Complete Book of Composting*.

A second school is the Mystical-Germanic-semi-religious efforts of the followers of Rudolf Steiner, whose disciple E. E. Pfeiffer has written numerous works on Bio-Dynamic Gardening, *The Art and Science of Composting* is one of Pfeiffer's works.

The third school of compost making is the Systems—Whole Earth—UN-Technological school, exemplified by *COMPOSTING, Sanitary Disposal and Reclamation of Organic Wastes*, by Harold B. Gotaas.

A few comments on each of the three:

- 1) Common: It is unnecessary to buy Rodale's book *The Complete Book of Composting*, as sufficient information is contained in the superb work by Rodale *How to Grow Vegetables and Fruits by the Organic Method*. But there is additional information in the *Complete Book* which may interest a few people with spare \$\$.
- 2) Bio-Dynamic: These techniques have to be seen to be believed. On the surface they involve adding to compost heaps extracts and solutions prepared in very diluted form from various weeds and plants. But the reasoning behind this is very very deep and mystical and quite beyond me. It may appeal to anyone digging astrology.
- 3) Systems: Written by a professor of Sanitary Engineering at Berkeley, this work contains 9 chapters, the last one justifying purchase of the entire book: Chapter 9. Manure and night-soil digesters for methane recovery on farms and in villages.

Had you heard rumors that you could get your compost heap to produce methane from which you could have light, electricity, power? This chapter nails down the techniques and the references at the end cover the field.

Companion Plants and how to use them, by Helen Philbrick and Richard B. Gregg. Copyright 1966 by the Devon-Adair Co., 23 East 26th St., NY NY USA. My edition, published in England by Stuart and Watkins Ltd, 45 Lower Belgrave St., London SW 1, UK

The American Indians planted corn and beans in the same spot, knowing that for some reason both plants would benefit.

Farmers repeatedly rediscover the fact that soybeans and corn grown together increase each others growth and yield.

This small book (84 pages) by two bio-dynamicists lists a large number of known plant associations, both beneficial and harmful. "Peas and radishes are mutually helpful. Radish and hyssop dislike each other. Keep raspberries away from potatoes."

Pyrotechnics by George W. Weingart, Chemical Publishing Co., Inc, Brooklyn, N. Y.

Ever wanted to make fireworks, bombs, aerial mines, light, smoke, fire, noise? Details are here. This is probably the best text in English (which must be said as best texts in world are probably in Japanese, to judge by their displays).

Gladney Oakley
Australia

Gladney Oakley is the sort of name there should be a song written around.

Rip Rap Sacker

While looking through your latest catalogue I came across an ad for building walls out of concrete rip rap. I was surprised to say the least, in that I have a machine that sacks rip rap. My machine, which was made in 1953, has been used primarily for flood control but could be easily used in the same way as the Dicker Stack International. My machine has a tremendous output as compared to other commonly used methods of placing rip rap. Usually other methods are completely manual and require super laborers to put the 150 lb. bags in place. My machine goes right to the work and puts out the bags almost in place. I took over this business May of 1969 from the builder of the machine Mr. Al Figueroa of Redding, California. Mr. Figueroa had been working with rip rap since the early 20's and this machine was the final product of years of experimenting and refining of other methods. He had this machine patented (I now have the rights) in 1953 and worked it exclusively in Shasta and Humboldt counties. Now I have tried to expand it into other areas and possibly in other ways.

I am out of work until spring but would like very much to find people that would be interested in using the machine for new purposes. I have low winter rates and anything that is interesting possibly lower.

My usual rates start at \$2.70 a cubic yard (10¢ per sack) with the renter providing the concrete and the crane (back hoe or forklift) plus men to work with the machine. (I go along with it to fill it and keep it clean) I would have to talk about the type of job before any definite price could be quoted.

Thank you,

Richard Karch
Karch Rip Rap Service
387 Sanford Road
Santa Rosa, CA 95401



John Holt Suggests

Don't know whether the Catalogue is much into the Hi-Fidelity sound business. Hi-Fidelity is an imprecise term. It is a spectrum. But the smallest and least expensive speaker that seems to me to be entitled to call itself hi-fidelity is the new Dynaco. It is really quite extraordinary. I made A-B tests of it against a KLH-6, a very fine speaker, and though in some respects the 6 was better, deeper bass, somewhat more fullness—in other respects, I felt the Dynaco was quite definitely superior. In really dense textured material, large orchestral and choral passages, the sound is somewhat better defined. Anyway, it is a fine piece of work—list price \$80, discounts for less than that at some places in the east.

Some of the best European tape recorders can be bought much more cheaply from a London firm called C. C. Goodwin, Ltd., 7, The Broadway, Wood Green, London N22, England. The new Tandberg 1600X tape deck which sells here for \$250, they sell for \$172. To that you would have to add cost of shipping and some duty, but the total would not be as high as \$200, which is a useful saving.

Feeling rich these days. Bought a couple of Rectilinear X speakers. Tastes differ in these matters, but I haven't heard anything I like better at any price.

A portable tape recorder is a very good gadget for school. CONSUMER REPORTS recently recommended one from Sears. I bought one and have tried it out and it seems to work very well. Good sound quality.

An English audio outfit called Sinclair makes a little stereo amplifier called the Neoteric 60 Mark MK II. An outfit called Audio T, 16 RR, Dryden Chambers, 119 Oxford St., London W1, England, sells it for 46 pounds, which with shipping and duty it all comes to about \$125.00. I took it to one of our best local hi-fi places, and they were ecstatic about it. Not only is there nothing of comperable power and quality at that price in this country, but the little gadget is so tiny you can hardly believe it. A really elegant piece of gear. The manufacturers say it has 20 watts per channel, but this is extremely conservative.

Best,
John Holt
Boston, Mass.

Silk

Silk yardage from Thai Silk Company, 311/6-7 Surawongse Road, Box 906, GPO, Bangkok, Thailand

I don't know that the item warrants a review as such. It is just the most beautiful fabric I've ever seen. When you see it you know you must wear it. I've never seen their incredible colors in any other fabric. Comes by the yard, 40" width, 3 or 4 different weights, solids (which are really made with warp & weft of different, sometimes complementary, colors) and gingham-type plaid (1" or 2" checks.) When I wrote, ca. 2 years ago, they would send generous samples for 1 genuine U.S.A. quarter.

Charles Eby
Laurel, Md.

Fuses and Cannons

for someone who can't get fuses locally W.H. Zeller seems like a good source. The fuse is good for about anything including bombs. He also sells books, cannons and a little bit of everything else. He sends a bunch of odds and ends and a catalog free of charge

SAFETY FUSE

This fuse is of the highest quality obtainable, with a burning rate of approximately 30 seconds per foot. It is 3/32 of an inch in diameter and is double coated with a special red lacquer. It will burn under water and under ground. However it should not be subjected to prolonged exposure to water or moisture.

William H. Zeller
1416 Keil Hwy.
Hudson, Mich. 49247

Peace,
Chris Christian
Virginia Beach, VA

Bill Lange Suggests

I wrote a letter last week and forgot the most important part. "Vise Grip Jr." made by Peterson Mfg. Co. Inc., DeWitt, Nebraska. It is a very fine off center locking pliers. My sister uses one in the kitchen. Its 5" long and just fits the hand. It has a wire cutter that will make short work of coat hangers. It will crack nuts like crazy. It solves problems. And it is first rate goods you can wear one out I suppose I haven't managed to yet. Cost \$2.50 or thereabouts. I bought 16 of them as I don't wish to do without, and I didn't figure they would send just a couple. I gave a few away, but very carefully. I enclose the little blurb you get with a new one. They are really the world's best. From Nebraska??

With a set of 3/8 drive sockets c point, Lady Slipper, (Lady's Foot pry bar) set of combination wrenches, (Box one end, open on other) hammers, crescent wrenches, 1/4" drive sockets, screw drivers, vice grips and a lot of other stuff you will find you will need you are pretty well set up for motorcycle and automobile work.

I also recommend lock-tite nut lock. It's expensive but it works, made by Loc-Tite Corporation, 705 North Mountain Road, Newington, Hartford, Connecticut 06111. Or from your local parts jobber. They have other products, but I haven't tried them.

Last letter to you I told you about the "amateur yacht research society" well I forgot a very important feature. A correspondence course in yacht design is offered.

In 24 lessons of about 2000 hours work, cost is \$325 payable in small instalments with each lesson. For further information write Yacht Design Institute, 111 Woodcrest Avenue, White Plains, New York 10604.

The sea is the last "free range" it's your last chance to "be a cowboy"

Love,
Bill Lange
Sweden



Fred says—

Buy "Vise-Grip" brand. None of the other similar locking plier wrenches are as good. The other sizes of Vise-Grips are just as good as the Jr.

"Vise-Grip" is like "Channellock". Brand name, not a generic term. Both better than others.

Audel's *Handy Book of Practical Electricity* is obsolete to the point of uselessness.

Guitars

Friends: here are a few things you might want to include in your catalog:

C. F. Martin guitars: There are a lot of things to look for in buying a guitar. Some, like the feel of the neck, are really subjective and individual with different musicians. But you also want to know that the instrument will last and improve with time and use. This is where the Martin company comes in. For a long time, they've been making honest, workmanlike guitars. I've had a D-18 for the last 6 or 7 years and it continually amazes me. The tone improves every time I play it. Martins are about the best steel-string acoustic guitars made in any quantity. They're a joy to play. They're not *too* good for riding freights/bumming because they're relatively fragile, but they hold up with proper care, for a long time.

Gibson Electric guitars: I don't dig Gibson acoustics too much—some people find them really durable but I don't like their tone very much. Gibson electrics are another story. I've had a Gibson ES 335 electric guitar for quite a while. It has a beautiful neck, and will do almost *any* thing in terms of tone production that you want from it. Things to look for in buying one are: 1) a good neck. Gibsons vary tremendously, so be careful. 2) "Humbucking" pickups are really the best on the market. Gibsons last forever. Mine's fallen off stages all over the country, & it's still good as new. If you buy a Gibson, try for one over 2 yrs old (pre-1968), otherwise examine the workmanship *very* critically.

V. C. Squier strings: These strings are *really* hard to find, which is a damn shame, because they're the best strings made in the U.S. They're smooth to play & will enhance the tone of any stringed instrument. I've only used their guitar strings, but I suspect the others they make (violin, etc.) are just as good. Buy your music store 'til they get some in. Here are some kinds they make: ES-2500: Top! these are *smooth* roundbound strings, \$5.75 a set (list) & worth it. Also in light gauge, ES-2550. They also make nylon wound electric guitar strings, which I haven't tried. These could be really beautiful strings (ES-8000) V.C. Squier Co. 427 Capital Ave, S.W., Battle Creek, Mich 49016

Stan & Jane Davis
Denver, Colorado



OK

Suggestion and Review of:

Boynton Studio
118 Brook Street
Scarsdale, N. Y. 10583
914 725 1586

No list of places to get electronic equipment can possibly be complete without Boynton Studio. They specialize in sound gear, both new and used, and their prices are often less than half of other places'. They publish a monthly listing of the stuff they have, and it changes that frequently. Also listed are consignments from their subscribers. Everything is sold "satisfaction guaranteed," with a ten-day, money-back policy. Service, on my \$5.00 order, was practically instantaneous, and they seemed unconcerned that I forgot to allow for the 5% New York sales tax.

The monthly listing is FREE from Boynton Studio.

David Lipson
Monticello, N. Y.

PROFESSIONAL AND AUDIOPHILE AMPS AND PREAMPS:

ALTEC 172B amp	50.00
ALTEC A-256C 70w. amp	65.00
ALTEC 128-A power amp	80.00
ALTEC 255-A amp. looks clean, as is	65.00
ALTEC 260-A 260 watt PA or recording amp. Like New	1125.00
CINEMA LOW VOLTAGE POWER SUPPLY	25.00
COLLINS 212Y Remote amp + COLLINS 60 mixer (for 2 lines)	125.00
COLLINS 212Y remote amp only	75.00
COLLINS Single Channel remote amp, battery 097-4143-00	60.00

etc., etc., etc.

Knives and Pipes

This letter is in reply to your card of February 3. I wrote to you about listing my handmade knives in the Whole Earth Catalog.

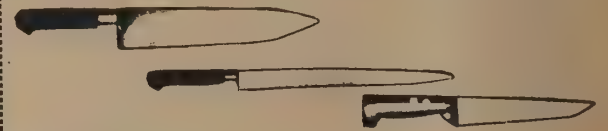
I must explain further about myself. My main occupation is the smoking pipe business. About two years ago I began carving wood and making pipes. I found that the pipe industry was completely mechanized. I have gone back to making pipes completely by hand, the way it was done in Europe before 1920. When I started there were no tools on the market for this type of work, so I began to make my own. My knife making is basically concerned with specialized wood carving knives, but I can make almost any size or shape blade and handle to match. Many of my knives are also used by leather workers. I use the best steel for the blades and the handles are laminated leather. When I sell a knife the handles are left unshaped, so that the buyer can carve it to fit his hand. The blades are also left in a state of near-completion, because each man shapes his knife differently. The knives are complete, they just need to be shaped and sharpened. This makes each knife personal for the buyer.

As I said before, my pipe business is my main work. I have sold several to large pipe stores in New York City. These pipes are completely hand cut and finished. This makes each one different and distinctive. In this way, I can fill any order, any shape, size or style.

Dennis F. Foreman
Brooklyn, New York

Custom-made knives and hand tools made to order: Blades used are finest steel for long edge life. Good for wood or leather. Knives come assembled. Write for brochure. Dennis F. Foreman, 155 Avenue U, Brooklyn, N. Y. 11223.

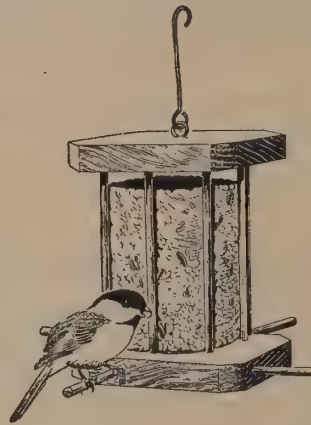
Design your own pipe. You can now have any shape or style pipe. My brochure will explain in full detail how to design your own pipe. All pipes completely hand cut and finished! Only finest aged briar used. Prices start at \$10.00. Dennis F. Foreman, 155 Avenue U, Brooklyn, N. Y. 11223. Send for brochure.



Bird Houses

A very charming little catalog of bird houses & feeding stations is available free from J. P. Barrett, 921 East Central Avenue, Ponca City, Oklahoma. Prices range from \$3.00 for the Gable Roof Wren House, to \$60 for the "beautiful 24-room home for purple martins."

[Suggested by Donald B. Miller]



Economy Music

A couple of suggestions:

1) Re Anonymous' suggestion (Jan., p. 11) on manipulating the Establishment by joining book clubs in order to save money on introductory offers. You can also apply this method to record clubs. For example, you buy 5 or 10 records for a nominal amount and promise to buy an equal number at full price during the next year or two. If you initially choose expensively priced records (e.g., classical), you will ultimately pay about half of list price for the total number of records you buy. One problem—it took us three months and some heated correspondence to convince Columbia Record Club that we were resigning after our initial obligation was met.

2) If you own a tape recorder a cheap way to accumulate a classical music library is by taping records from radio broadcasts. When recording classical material it helps to know the playing times of the compositions you will be taping. A year ago (and we assume at the present) there was available a booklet that lists the playing times of most of the major basic works. *The Time Table for the Classical Repertoire* costs 25 cents from Martel Electronics (ATTN: Time Table), 2339 S. Cotner Avenue, West Los Angeles, California 90064.

Peace,
Art & Becky Henderson
Norfolk, Virginia

Steve Schlossman suggests

Ward's Scientific—Catalogue, Rochester, N. Y. I can't tell you what their doing this year, I haven't got mine yet. It got all kinds of lapidary equipment, books, rock samples, fossils. Really incredible stuff.

Ray Gfellow, casemaker, Polson, Montana. Mr. Gfellow makes very good leather pouches and case. Most of his equipment it designed for geologists, but he lists a number of leather pouches that can be carried on a strap over your shoulder.

His cases are the best I've seen. The leather is very heavy and everything is riveted. You just look at them to see how good they are. They just look it and feel it.

I ordered a map case which fits on my belt. It carries a foldup, pencils and rulers. After juggling everything it pack you appreciate it. His prices appear fair: \$18.00 for the case I just described.

He has a pamphlet catalogue available from him directly (but he's really slow) or Lemont Scientific, Inc., Pike St., Lemont, Pa. 16851

Steve Schlossman
Belchertown, Mass.

Return of Hong Kong

Dear Whole Earth Catalogue—

Universal Suppliers is a mail-order house in Hong Kong with excellent (1/2 price) deals on Nikons, Leicas, Pentaxes etc etc. (I just got a Pentax spotmatic from them for \$139—speedy delivery, friendly letters)—also telescopes, ivory goodies, clothes, most everything I think. You might write them for a catalogue—

G. P. O. Box 14803
Hong Kong

Love & hugs & peace & praise
Anne
Canyon, CA

Chemicals

Chemicals for the small laboratory

Hy-Labs Co.
P. O. Box 8652
Main Post Office
Chicago, Ill. 60680

No C.O.D. Orders

Alan Kalker

Cabin House Project

Enclosed is a review of the "Cabin House Project" which I saw when I visited Goteborg this summer. The inventor is as interesting as the device he invented: he worked his life as a minor clerk in the shipping firm at Goteborg. When he retired, however, he began thinking up little things. A bent wire toilet-paper holder or napkin holder has already sold millions because its simple design interested both the manufacturers and the buyers.

The "Cabin House Project" is a pre-fabricated, semi-permanent cabin large enough to house six or eight men (15'9" x 8'11") which is also light enough to be transported easily to its site. It comes packed in two boxes with a total weight of 263 pounds and takes up about 44 cubic feet. It can be erected in less than an hour by two men. And this is accomplished with remarkably little hardware: the whole thing is put together with 140 screws.

These "quick-lock screws" are the heart of the "Cabin House Project." They are simply two lengths of threaded screw joined to a fitting for the locking wrench. By sliding the screw between the two pieces of construction board to be butted against each other, and by turning the screw half a turn, the two pieces are joined. The structure is then very stable. These screws can also be removed and used again when the cabin is taken down. The boards are a little chewed up by the screws, but the integrity of the joint is maintained by moving the screw an inch or so along the board each time it is put in.

The minimum life-expectancy of the cabin is conservatively estimated at 2 1/2 years. In actual practice, it lasts much longer. The roof is a sheet of plastic and the walls fiber-board. These require little maintenance.

Because it is especially useful as an emergency shelter, the Red Cross has begun testing these cabins in the field. But the "Cabin House Project" is only one application of the ingenious little "quick-lock screws." I have seen working models of boats and platforms built upon the same principle.

For more information, write to:
Cabin House Project
c/o AB Gotaverken
Goteborg, Sweden.

Robert N. Ross
Philadelphia, PA



On the Road ...

Spin Fishing

I'm a nut on survival and this spinning reel gadget is a beauty. Called a handline spinning reel it's a hard plastic, 6" diameter like a wheel. You hold the thing with one hand, and larlet fashion, cast with the other. The line spins off the reel as on a regular open faced spinning reel, but since this handline reel is 6" in diameter compared to 2" or 3" of a fresh or salt water reel, the line spins off faster, with less fouling, and also the retrieve is much faster. Naturally there is a lot against handline fishing. No rod to play the fish and to take the punishment the fish gives out. The pull is directly on the line and not on the rod so the line must be stronger. But I'm talking now about a cheap rig to carry anyplace with you and one that will land all kinds of fish. I've had more fun with the thing than any rod and reel combination.

As you know spin fishing (where the fish line pays off the face of the spool instead of the reel) is a very old way of fishing. Even before the invention of the bottle or can, indians fished in the spin off style using a kind of wooden shuttle. People throughout the world spin fish off bottles and cans. In Mexico it's called the Dos Equies reel after that famous dark beer. In Australia they use handline spinning reels similar to this Boone Bait Co product in three sizes going from a five inch to a ten inch. I bought one of these in Trinidad as Trinidad imports from Australia. The word on this Boone reel is that years ago the Japanese dropped off such a reel in the West Indies. The Cubans then got onto the thing and it made its way through Key West and now to Winter Park.

I like to use 25 lb monofilament line on mine although you can use from 15 to 50 lb. Fill it up (25 lb test will take about 300 yards) to within a half inch of the flange, whirl the lure along side or around your head and cast. Retrieve smoothly or in short bumps.

I'm speaking now of lure fishing. With lead and bait of course you just let it lie in position until you feel the nibble-strike. As I say I'm hung up on survival but I'm also a purist about fishing. I never use bait, only lures, and only single hooked lures, perhaps a spoon or two, but I prefer jigs. Leadheaded jigs. My favorites are: 1. The Bill Upperman bucktails. 2. The chrome headed Japanese feather jigs.

Ten years ago off a beach just north of Puerto Vallarta I was casting a Japanese white feather jig off a "Dos Equis" reel and picking up a channel bass or two and snook. But it was hot and I had already drank the beer in order to use the reel and so I took to the sea, carrying my beer can reel and line and lure with me. Thus began the most pleasure I've ever had. I call it Swim Fishing. Now these days I take the Boone reel out with me, 25 lb test mono on it, and a bucktail (1/4 oz) on the end. Off the beaches in Santa Monica Bay I've caught halibut, skip jack tuna, small blue shark, leopard shark, bonito, mackerel, sand bass, calico bass, white sea bass.

For bottom feeders I merely kick (using swim fins) along slowly and let the lure bounce off the bottom. For bonito, etc, I swim flat out, holding the reel in one hand and in this way giving the jig action with each stroke. When the water is clear and in the kelp beds of Point Dume or Laguna Beach I wear a face plate and snorkel, dive and look for the fish. I've been in a salad of kelp and into a school of calico and placed my yellow Upperman right on the table of sand before them. Letting out line I kick to the surface. Then yoyo the lure. Wham, a strike.

I've caught great barracuda and mangrove snapper in the Bahamas, snook in Trinidad, Pompano in Cozumel and the Virgin Islands, Uluu in Hawaii and the Tuamotus, flounder off Hong Kong, jack in the Philippines, and once I foul hooked a two ton Manta Ray off Yelapa, Mexico.

The beauty with swim fishing is that you swim the water the boats can't work. You also work ten times the water that a surf fisherman can because you present your lure parallel to shore, fishing it all the way. One of my finest experiences swim fishing was when a surf was running off Ft Lauderdale, Florida. I had my lure out behind me, resting on the bottom. I held onto my Boone reel. Here comes a wave. I body surfed it in and on the way got a big strike. I rode the wave to shore and reeled in a three pound Jack Crevalle.

Available for \$2.00 plus shipping from Handline Spinning Reel, Boone Bait Co., Inc., Box 571, Forsyth Road, Winter Park, Fla. 32790

I've got another good gimmick for you. You ought to check it out. You can't buy it in retail stores, and I don't know why. I've never seen it for sale, always send to the source for mine. Over the past ten years I've had four of them and they are by far the best and cheapest barq outfit on the market.

OLD SMOKEY. Looks like two galvanized tin pails sitting mouth on top of mouth. Hot smoke oven (better than that expensive but chic Japanese cooker) with two drafts for control (as good if not better than Weber and much cheaper).

I use our for everything. No burn. No flare ups. If fat on meat does flare, just close drafts somewhat. I cook whole turkeys and chickens. Set them on lemon slices in foil boat and on grill and pop on cover and leave. No turning. Baste some. No spits needed. Sometimes I use wet smoke chips. Fabulous for salmon which I have cooked whole or in steaks. I've got both size Smokey's but use the No. 14 (14 inch diameter) more often.

OLD SMOKEY, Burkhead Mfg Co, 1920 Harrington, PO Box 4, Houston, Texas 77001

No. 14 is \$9.95, No. 18 is \$14.95. No shipping charges.

Ben Masselink
Pacific Palisades, CA

Adobe Hacienda

Are you onto a book outfit in Glendale, Az, called The Adobe Hacienda? They furnish an assortment of Survival, Herbal, Medical, Military documents and books, and their mail-order service is superior. This outfit seems to be somewhere right of the Birch Bunch, and some of their offerings are pretty scary. Nonetheless, they inadvertently (what right-type would do such a thing verantly?) feed the needs and/or curiosities of The People as well. Their address is: Rt 3, Box 517, Glendale, AZ, 85301.

S. Stanton
Pacific Grove, CA

Angier Books

As wilderness freaks making plans for a get-away to the Canadian Wilderness, we were delighted to discover these books and grateful to Brad and Vena Angier for doing it first and documenting the ways and means. The Angiers left Boston and New York over twenty years ago with two pack-sacks, a little money and a well-worn copy of "Walden" they traveled by train, canoe and portage to a spot by the Peace River near Hudson Hope, B.C. and built a log cabin. The Angiers still live in a log cabin on the Peace River and Brad has a new book which will be published this year. Writing is the Angiers means of making it in the woods, he can supply all of his books quickly, and if his letters are any indication he will be happy to answer specific questions for you too. Write him at Box 149, Hudson Hope, B.C.

How to Go Live in the Woods on \$10 a Week (price \$5.00; Stackpole Books, Harrisburg, PA 17105) is like a *Whole Earth Catalog* for wilderness buffs—all the tools are here for finding land, getting to it, and living on it with relatively little money. It begins with a comprehensive chapter on how to get started, which includes over 100 addresses of sources of information on getting land (homesteading, buying cheap, or just squatting); getting to the land; employment; maps; agricultural information; geological info.; hunting and fishing regulations; weather; etc. There are detailed chapters on living conditions in Alaska and Canada, exploding some myths and telling some truths about each. While the first section of the book is devoted to getting everything together for the move, the second section is involved with stretching that first grub stake into a lifetime. There is a fine chapter instructing the novice at hunting for food (hunting for any other purpose is not mentioned) and an excellent chapter on preparing wild game for preserving and eating. "Cabin Canning of Meats and Vegetables" answered every question we had about working without conveniences. Instructions for corning and smoking meats are included. Angier gives good information on identifying wild foods and some tempting recipes for them, plus recipes for preparing elk, moose, bear (even bear bacon), and sourdough breads. A must for anyone who wants to go to the woods.

Mike and Betty Eiss
Alexandria, VA

Porta-Shower

PORTABLE SHOWER. Complete! Self-contained!

Needs no connection to water supply or drains.

NOW—shower wherever and whenever you like. Cleaner and more hygienic than using public showers. Use outdoors with privacy, or in trailers, campers, trucks, boats or cabins. Sets up in two minutes. Packs into small carton 8 x 8 x 29". Weighs only 8 lbs. Fully guaranteed for 1 year.

Simple to use: Fill container with warm water and pressurize for 20 seconds. Step into curtained shower and turn on water for leisurely 6 to 7 minute shower.

DELUXE MODEL with hand-held telephone-type shower head \$35.95 Ppd.

BASIC MODEL (without curtain assembly or catch-basin) \$25.95 Ppd.

Available at selected dealers, or send check or money order (Postpaid; Calif. Res. add 5% S. Tax). Send to:



PORTA-SHOWER
Suite 300, 999 Commercial
Palo Alto, California 94303

—Money back guarantee—

Alternate Society

The Alternate Society newspaper, listed in January Catalog, about communal living has moved to new quarters. The new address:

P. O. Box 38
Madison, Ohio 44057

which happens to be the address of the Mother Earth News.

Both papers have given us reinforcement in our search for a different lifestyle. What we want to try is communal living and sharing in a rural atmosphere. Mother Earth can encourage by giving ideas on possible ways of building shelters and sustaining life in the community.

It helps one with doubts when he can read about others having success in the field he wants to try. This is what Mother Earth, Alternate Society and Whole Earth can and are doing for us pioneering (with some fear) souls.

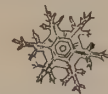
all are one

with Love and appreciation,
K. Bunin
Edison, New Jersey

Know Snow, he said

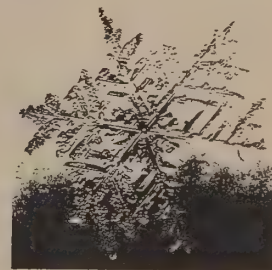
You never know when you might be called upon to identify a snow crystal. For instance, next time you are buried by an avalanche and waiting to be dug out, be sure to note the configuration of the snow particles. It might be comforting to know it was a spatial dendrite that got you.

Edward LaChapelle, a man who got into snow crystals by way of avalanche research, has produced a fine manual for snow scientists and dimensional explorers. Look at the fifty black-and-white micro and macro photographs. See some of the things that can be done with water.



Tom Ireland
East Palo Alto, CA

Edward R. LaChapelle, **FIELD GUIDE TO SNOW CRYSTALS.** Cloth \$6.50, Paper \$2.95. University of Washington Press, Seattle, Washington 98105



Movin On

Tips on familiarizing yourself with an area—we did this when we moved into Lake County. Read Yellow Pages, cover to cover. The phone book also has other good parts too. Also, want ads and local paper provide much information of interest to the newcomer.

We lucked into a fantastic scene—we are CARETAKERS on a 5 acre farm on Clear Lake. We get free house, utilities and a salary of \$125 per month and also all the fruit and nuts we can eat from the orchard. Fish from the lake, our own garden etc. I report this because I am amazed at the number of CARETAKER POSITIONS open in this area. Check the Santa Rosa PRESS DEMOCRAT—there are usually several caretaker ads at any given time. Our particular "feudal landlord" is a dream—he is only here once or twice a month for a couple of days. Rest of the time place is ours. He is particularly kind to longhairs. Some are not, of course, and generally owners prefer retired couples. But give them a good rap about "youth having more energy and creativity" and they might hire you. Worth a try. We got a garden of Eden—you might too!! We don't want to stay here indefinitely, but it makes a great "half-way-house" between city and community.

Larry Kelley
Kelseyville, CA

Peter Limmer Boots

The two most delightful means of transportation may be the BMW Motorcycle (about \$2000.) and the Peter Limmer Boot (about \$40.) I wish to suggest the latter:

In Intervale New Hampshire there is a barn like structure from which hangs the simple sign: "Peter Limmer, Shoemaker" Here are made what may be the finest hiking boot currently available. Mr Limmer and his sons offer the boots at a price which is really extraordinary. They are completely hand made and are really custom made to measure. My wife and I had the pleasure of visiting the shop and being measured by Mr. Limmer. He assured us that he usually gets fine results with his special mail order measuring pattern though. I asked about the "unusual" poor fit and he explained that the individual need only return the boots for refund if he chooses or enclose some suggestion about improving the fit. In this case, a completely new pair is made up. Mr Limmer explained that he can continue this exchange process until the customer is satisfied. All he does with the completed boots is reduce the price slightly and sell them as "ready mades" to his shop customers.

A descriptive brochure is available free. Also, the boots are available in an insulated version for an extra \$5.00 or so. All in all: excellent support with superb comfort.

The only information necessary: Peter Limmer & Sons
Intervale, New Hampshire

Peace,
Kenneth Sole
Brooklyn, N. Y.

Boy Scout Boats

For inclusion in the catalog there is one brochure published by the Boy Scouts of America, which I think is free, listing various low cost plans for small sail and row boats which can be built at very nominal cost. (like less than \$50-\$100).

Gardner Deane, Jr.
Atlantic Beach,
L.I., N. Y.

AAA

Comments—you seem to have passed up a couple of established things that are available to everyone. One is AAA, which I'll review for you:

If you own a car or if you're likely to be driving one much, an AAA card is worth its weight in battery charges. For \$15-20 a year you get 1. Free Towing, battery jumps, emergency gas delivery. 2. The best up to date maps available for the U.S., plus booklets of camping sites, plus help in choosing travel routes. 3. Insurance discounts 4. Bail for misdemeanor traffic charges. Our AAA has paid for itself in the first 3 months of every year we've had it.

(AAA offices in every major city)

Michael Wells
Portland, Oregon

P. S. Maybe a pat on the back for Singer Sewing machines?

Margaret Cherran Suggests

I have a couple of suggestions which I hope you can use. (You probably know about this one). You can travel on the Canadian Pacific Railroad from Montreal to Vancouver for \$51.00 (Canadian or \$49.00 (American), coach, no meals. (For three days—who cares). I really didn't believe this so I wrote to the company and it was verified. That is so incredibly cheap & what a trip, through the Canadian Rockies, etc. Right now some friends are travelling this train and I'm dying to hear how it goes.

Also—there is a company in Dover-Foxcroft, Maine called Cushings Perfection Dyes. For 25¢ they will send you a color card. They have such incredible colors (no big company can match them). Unfortunately most retail stores don't carry their dyes (I've only seen them in one store in Prov.) But their mail service is good. They also sell supplies for batik and manuals on tie dying and batik. Give the little guys some business. Rit's colors are so bad.

Visit your public library and start poking around in the *old* books they have—especially in crafts, needlework and old periodicals. I'm a freak but I love libraries. Quite a trip.

Love & Peace—
Margaret Cherran
Providence, R.I.

Rent It

Dear WHOLE EARTH CATALOG:

A very important tool that I think should be mentioned are rental companies. They will rent ANYTHING, tables, saws, trucks, etc. Ask about insurance, transportation clauses, and read ALL the fine print. On some large equipment like dump trucks, cranes, you may need to hire an operator and also trailers are needed for some stuff. The type, kind, and quality vary greatly so go easy. Check your Yellow Pages or ask at the local hardware store. The companies go under names like U-Rent-It, Rent-A-Tool, U-Haul, etc.

Yours Truly,
David Smith
Mendham, N. J.

Good article on this in *Popular Science* about 3 or 4 years ago.

Book Service

The North American Naturalist Bookstore
Box 133, Plainfield, Vermont 05667
"Postal access to readings in the natural sciences, natural history, and natural living"

A very tasty selection of books, all written around better use of and appreciation for our natural earth-home. It reminds me a little of the *Whole Earth Catalog*. Titles include *Down the Colorado*, *Freezing & Canning Cookbook*, *The Sea Around Us*, *the Stalking books*—everything from ants to ecology.

Build-a-Boat

Texas Dory Boat Plans Catalogue, by Capt. Jim Orrell. \$2.00, I think, from Texas Dory Boat Plans, Box 720, Galveston, Texas 77550

A catalogue with illustrations and line drawings of plans for boats 15 to 45 feet, sail, outboard or inboard. Plans cost \$10 to \$15 but by careful drafting you could make your own from the line drawings.

By following one of these plans even you and I can build a strong, seaworthy boat of plywood for less than it should cost to power it. These designs are mostly modifications of the traditional dory workboat. The angular shapes make for relatively easy boatbuilding. You need a skill-saw, mitre box, a copy of Stewart's *Small Boat Construction*, a whole mess of clamps and a place to do it. I used my living room.

Tom Tarr
North Vancouver, B.C.
CANADA

Bishop's Ultimate Tent

I want to suggest a tent manufacturing company for the Nomadic section of the *Whole Earth Catalogue*. The tent, called "Bishop's Ultimate Tent" was used on the American assault on Mount Everest and can be seen in the Sierra Club's book *Everest: The West Ridge*. (see page 93). Barry Bishop, who helped design the tent and is responsible for its production, is now in Nepal working on a PhD thesis I believe in cultural geography. So the company is being run by some friends of theirs, Mr. and Mrs. James Beyersdorfer. Their address is 6211 Wedgewood Road Bethesda, Md. Mrs. Beyersdorfer handles most of the business out of her basement. Please do get in touch with her for what further information might be needed in writing a review.

Thank you.

Sincerely,
Michael Salzberg
Cabin John, Maryland



Sweaters Shoes & Gear

VICTORY SWEATERS, made in England, distributed in U. S. through Fulton Supply, Fulton Street, New York City. \$18.95 (?)

These sweaters are made of wool with the oil left in—are very good for sailing, cruising through rain forests, or just plain potting about in. Those who have them live in them. Like a sweatshirt (with high rolled collar), but for colder weather. Fulton supply, which puts out a free catalog, outfits both commercial fishermen and sailing people. Good place.

"TOPSIDERS," which are sailing shoes (leather & nylon & canvas), boots; both with special tread. Supplied by Sperry, somewhere in Conn. (Streeter & Quarles West in San Francisco carries the brand, and can tell you the home base) Various prices.

These shoes seem to cost twice as much as those put out by the competition struggling to break Topsiders' corner on the market. For example 11.95 for the canvas, 12.95 for the nylon sneakers. Don't know how successful the competition has been; Topsiders seem to be the universal sailing shoe. Have used them; they work.

FOUL (OR WET) WEATHER GEAR, made by Helly Hansen of Norway, distributed in U. S. by Canor Plarex, Inc.

- 1) 4200 23rd Ave W.
Seattle, Wash 98199
- 2) 36 Bellewood Ave.
Dobbs Ferry, N. Y. 10522
- 3) 41 Alexander Street
Vancouver, B.C., CANADA

This seems to be the best gear around. Used by many deep water sailors. Have seen it (felt it? touched it? etc.) and it works. Very good stuff.

C. Pitt
Urbana, Ill. 61801

Land Again

About the item in your Spring '69 issue about acquiring tax delinquent property; it will work, I believe, as set forth, but the title could end up being a "shaky" one, and there is always the chance you will just end up paying someone else's taxes and improving his property gratis.

Better deal and more straightforward, is to locate several tax delinquent properties, contact the owner or heirs and offer to buy at a low figure.

Also, in California, tax delinquent property is deeded to the state after a few years (5, I believe) and then sold off yearly at a tax sale auction.

Anyone acquiring property in the above fashions (and intending to keep it) should learn something about "searching the title." Otherwise you might, for example, end up with land with a huge public utility easement over it, or subject to a sewer assessment more expensive than the value of the property.

Title search fees by title insurance firms are often reasonable. These companies will sometimes "search the title" and issue a non-guaranteed "preliminary report" at low cost, anticipating that they will later insure the title. Title companies are also sometimes a source of free plat maps and other information.

Some factors to be considered when doing the land thing: government assessments (taxes & improvement districts) easements, rights of way, zoning, liens, "chain of title" and covenants, conditions and restrictions.

Researching can be done at various offices at the county court house or hall of records. Friendly real estate brokers can also be a big help.

A lot can be learned by phone.

Alex Gough
Atascadero, CA

Grab Bag

SURVIVAL EQUIPMENT

Yerger's Supplies, Box 8138, Anchorage, Alaska 99504. Catalog contains Air Force Survival Equipment selections for light aircraft.

Survival Equipment Company, Division of Victor Tool Company, Oley, Pennsylvania 19547. Survival equipment for aircraft owners and pilots. Kits, tools, & books. Everything from a one-man life raft model PK-2 at \$123.00 to an orange smoke bomb for \$2.25. In sixteen pages this is a very complete survival equipment company. Many kits are useful for any wilderness traveler on foot or horseback, or river float trip.

Northwest Wilderness Survival Schools, Life Support Technology, Inc., 4530 SE Roswell Street, Portland, Oregon 97206. Summer Sessions \$60.00. One week. They also have survival kits for snowmobiles along with a film on winter survival available for rent.

Survival Research Laboratories, 17 Marland Road, Colorado Springs, Colorado 80906.

- A. Individual one man three day survival kit designed for the average Cross Country flight. \$37.85
- B. "Trail Kit" for the shirt pocket 3.85
- C. Special information about Alaska and Canada

GEAR

Ocate Corporation, Recreational Equipment, Subsidiary of Aztec Industries, Inc., Post Office Box 2368, Santa Fe, New Mexico 87501. The Ocate Venture Polyfoam Sleeping Bag, from \$24.00 to \$42.00, blue or gold. The bag is comfortable down to a range of 0 to 15 degrees. Ripstop nylon cover foam core and nylon liner. Non-allergenic. Great for river trips since even when wet the bag acts like a wet suit keeping some body heat.

Polyfoam mukluks great for snowmobiling, ice fishing, and snow shoe trips. Children's 12.45, extra large \$16.95 and \$14.95 for all sizes in between. Send your shoe size.

Also polyfoam sno-mitts and mittens for \$7.95. Send dress glove size.

Camp Trails, P.O.B. 13400 or 3920 W. Clarendon Ave., Phoenix, Arizona 85031. High quality camp gear. Example:

The Fanny Pak No. 404. Designed especially for those who want to keep their shoulders free for extra ease in movement. Hunters, skiers, photographers, etc. Wear in back, in front or on the side. 1 1/2" wide nylon belt with quick release buckle, double zipper, inside elastic pocket tailored for contour fit, snag proof, water-proof nylon. 16" x 7 1/2" x 4" weight 5 1/2 oz. color, orange or green. \$7.25 retail.

Started making the tubular aluminum pack frame twenty-three years ago! Now making the magnesium frame.

The Conestoga Wagon of Today. Compact Bus Owners can build their own units for camping. Dot Campers, P.O.B. 2115, Culver, California 90230. Each plan set includes step by step instructions, bill of materials, and photos. Plans available for Volkswagon, Ford Econoline, Dodge A-100, Chevy Van, and GMC Handivan \$2.95 each.

Seeing Eye Headlight. Three inch wide reflector throws a bright beam 500 feet. Battery in belt pouch. Seeing Eye Headlight, \$6.35 postpaid. Modern Living Products, 409 City Hall Building, Rockford, Illinois 61104

A car safety shoulder harness that works and is easy to use. Inertia Reel/Safety Harness. American Seating Company, 901 Broadway Avenue NW, Grand Rapids, Michigan 49502. Available from the manufacturer for \$38 postpaid.

Shoulder harnesses save lives and prevent serious injury in the vicinity of 80% and yet few people use them.

American car manufacturers make the harness hard to use. Not so with the Inertia Reel/Safety Harness. It's easy to use. Just sit down normally and pull the straps over your shoulders just like suspenders. As with all harnesses this one must be used in conjunction with conventional lap belts.

MODEL ROCKET PRODUCTS

Vashon Industries, Inc. Box 309, Vashon, Washington 98070. Vashon rockets are liquid fueled. Altitudes of 1,000 ft. Electronically fired with parachute recovery. Catalog 25¢

Rocket Supply, River Edge, New Jersey 07661. Catalog 25¢

The Rocket Handbook for Amateurs, (Lt. Col.) Charles M. Parkins, Editor. An illustrated guide to the safe construction, testing and launching of model rockets, John Day Publishing Company.

[Lots more on rockets on page 40]

FOR THE SKY DIVER

United States Parachute Association, P.O.B. 109, Monterey, California 93940. \$10 annual membership dues. Applicant need not have made a parachute jump.

Benefits include: monthly magazine, *The Parachutist*, liability insurance, government representation, shoulder insignia, decal, eligibility for USPA sanctioned competitions, subscription to National Parachuting Directory, discounts on National Aeronautic Association membership, guidance in all parachute activities... eligibility for membership in USPA affiliated clubs and eligibility for parachuting licenses.

Earl Palmer
Corvallis, Oregon

Cable Winch

Re-reading your section on *Roadside Camping*; people who drive their rigs on woods roads, donkey trails, and such should have a lever-operated cable winch (ca. 2 ton cap.) to pull them out when stuck. They cost from \$30-60, depending on length of lift. They are better than winches powered by your rig because they'll pull you out backwards or sideways as well as by the front.

With a winch with 20' of lift, you don't need 4-wheel drive; and even with 4-wheel, you should have the winch in case of getting high-centered, as they say.

A winch really takes the terror out of getting stuck, and lots of the work.

Getting unstuck is a traditional craft; perhaps other cat. users know about other stuff on this score.

Best,
Jimmie Silverthorne
Philadelphia, Pa.

Noumedia Tapes

We're a new company assembling a tape recorded library of speakers on the subjects of human growth, humanistic psychology and conscious awakening. Our work grew out of a shared experience in human communication manifesting in the evolution of man's psyche.

We intend to commit profits not only to the needs of NOUMEDIA but to concerns such as the Bucks County Fellowship Fund supporting the work of Ram Dass and others. We invite your interest in this also.

We look forward to serving you.

COMMUNICATION IN PEACE

NOUMEDIA CO.

George Fisher

Their list includes tapes by Baba Ram Dass, William Shutz, Frederick Perls, Alexander Lowen, Margaret Mead, and others. Prices range from \$8.50-\$16.40. For a complete list & prices, write to Noumedia Co., Box 750, Port Chester, N. Y. 10573

Neil B. Wolf Suggests

I've just finished this very informative book and it seems to fit quite well into the Whole Earth scheme of things. It's simply called *Bows and Arrows*. It was originally published in 1923 as *A Study of Bows and Arrows*. The University of California Press had the good foresight to reprint in 1962. Saxton T. Pope, the author, became friends with the last surviving member of the Yahi indian tribe (which I believe was a California culture) in 1911 when the indian, Ishi, came to San Francisco. Ishi stimulated Pope's interest in archery and demonstrated for him the Yahi method of making bows and arrows. The arrows which Ishi made proved to be superior in flight to all others mentioned throughout the book.

P. S. Anyone starting a health food store will be interested in Organic Merchants. They have a free school for such people. Their "name is a statement of intent, not a claim to fame." They propose "Cooperative buying in large quantities for better prices; contracting growers to grow foods by strict organic methods; supervising suppliers to assure consumers that the highest standards of quality are achieved; creating a warehousing and distribution system that will eventually insure the availability of the highest quality natural foods in every part of the nation and, through this cooperative method of acting as their own middlemen, offering these foods at low prices; creating a laboratory which will do soil analysis for home and commercial organic growers and analysis of all products for pesticide residues." "No Organic Merchant will sell anything containing the following: white sugar, bleached white flour, synthetic sugar and salt substitutes, artificial flavor, artificial color, preservatives emulsifiers or other synthetics, corn syrup, cottonseed products, monosodium glutamate." Their cause is our cause, and is one to which we must learn to become dedicated. OM. (Organic Merchants, 1326 9th Avenue, S.F., CA 94122) Write for brochure.

Neil B. Wolf
Ketchum, Idaho

Free Lumber, Hardware, Etc.

Many mills in Northern Calif. Being closed down in areas that have been logged out. Mill buildings made of redwood, heavy timbers, corrugated tin can be gotten for the effort of dismantling & hauling away. We built two small houses that way with a little help from our friends. Glass for windows from wrecked V. W. Buses.

Best Wishes
Steve Jordan
The Sea Ranch, CA

Make Movies

We just made a movie on pollution and the San Francisco Bay, and no one here has ever even heard of Gary Snyder. "Ecology" is in danger of becoming a commercial catchphrase a general pacifier. Am trying to turn people on to quiet watching inward, seeing pictures of the world-earth there. If I can just get people to dig what Snyder is saying, we might make some nice movies again.

Anybody who has a thing he wants to see a movie made of (or about)—send the idea to me, too. Shit, it's amazing what things finally get made as movies.

Do right.

Smile.

Joe Valentine
c/o King Screen Prod.
500 Aurora No.
Seattle, Wash. 98109

Good Trips...

Parchment

The William Cowley Parchment Works, Newport Pagnell, Bucks, England, supplies Sheepskin Parchment & Calfskin vellum for about 1.2¢ to 2.5¢ a square inch. This is 1/2 to 1/3 less than anything I have found in the US. & the quality is extremely fine.

Richard F. Wheeler
Portland, Oregon

Forms in Japan

a suggestion:

FORMS IN JAPAN

Yuichiro Kojiro

translated by Kenneth Yasuda, photos by Yukio Futagawa 1965; 184 pp.

from/published by East-West Center Press, Honolulu

a very beautiful book about forms commonly found in Japan with an emphasis on the characteristic of the human spirit that created them:

forms of unity
forms of force
forms of adaptation
forms of change

generous photos (often double page)
forceful, concise and poetic text.

has to do with combs, tea pots, folded paper things, stepping stones, plank floors, flutes and windows, hoes and bows and sails, toys, brooms, rice heaps, roofs, ladders, beams and fish nets, etc. etc. the net effect is: you begin look more closely at the fork you eat with, the way you wrap a package or roll a joint, the way you stack wood, or arrange the food on your plate.

price is perhaps a bind . . . \$15.00 hardbound
but well worth a communal effort.
try to check it out.

tom green
Washington, D.C.

Martin B. Tittle Suggests

Frigistors, Ltd., 5770 Andover Avenue, Montreal, Quebec. Maker of solid-state cooling elements: blocks of bismuth-telluride joined by metal bars pump heat from one side of the "pack" to the other when electricity is applied, leaving one side cold. A contact plate on the cold side and a heat sink with fan on the other and you're in business. 3 kits of increasing dimensions and prices available for prototyping and fooling around. Lowest price kit around \$125. Information dated 1965. Lots of free info and engineering data avail.

Anglo Corporation, 4333 N. Ravenswood Avenue, Chicago, Ill. Ph. BU1-2727. Makers of clear envelopes of varying configurations filled with rare gases: xenon, neon, krypton, etc. All equipment necessary for prototyping and fooling around available. Custom work as well as ready-made stuff. Engineering manual with theory, products and circuits on request. Info dated 1965. Product cost: from \$1.50 up.

Bensen Aircraft Corp., Raleigh-Durham Airport, Raleigh, N.C. 27602. Makers of Gyrocopters, Gyrogliders for use over land and Hydrocopters and Hydrogliders over water. A one-man type copter which combines the most desirable features of a modern helicopter and an autogyro. 20-ft. two-blade rotor is free-wheeling. Avail. in kits. Construction plans with building and flying manuals available separately. Prices: Gyroglider: \$395; -copter: \$950 without engine.

Superior Marketing Equipment Company, 1800 Larchmont Ave., Chicago, Ill. Makers of rotary printing presses and related equipment and supplies. Rubber type in varying fonts, with picture dies, etc. Good for small tabloid-type newspaper or for printing notices. Inexpensive. 3 presses avail. Can be used to make rubber stamps of any size.

Basic Crafts Co., 312 East 23rd St., NYC 10010. Equipment and supplies for bookbinding. Tool kit, \$30, supplies kit, \$40, etc. Everything you need.

The "Casual" Portable Copier, a dry, electric photocopier avail from 3M Company (Box 3126, St. Paul, Minn. 55101) for \$70 with 14-day free trial. Avail only by mail. Free lit on request at above address.

Zuckerman Harpsichords, 115 Christopher St., NYC. Harpsichord and clavichord kits. Clavichord parts: \$100; Harpsichord parts: \$150. Single manual, single strung. Free lit and recording on request.

Re-Con Systems Corp., 342 Madison Ave., NYC 10017. Computer job-finding center for college graduates. The whole deal is free; employers pay them to find people.

Billotti Trinome Corp., P. O. Box 729, NYC. A rhythm metronome which combines 3 dissimilar beats into variable rhythmic patterns. Example; divides a set length of time into four equal parts with a bell, five equal parts with a light click, and six equal parts with a dull click, all simultaneously. Available from Targ and Dinner, Inc., 2451 N. Sacramento Ave., Chicago 60647.

Cousino Electronics Corp., 1941 Franklin Ave., Toledo, Ohio. Ph. 246-3691 Makers of Audio-Vendor, offering continuous playback from recorded tape. Single spool of tape unwinds and rewinds onto itself. Avail in time playing from 3 min. to 30 min. at 3-1/4 inches/sec. Used for sleep-learning and therapy, broadcasting, teaching, and sales. from \$6.15 to \$19.95. Free info.

Grace Tea Company, Ltd., 79 Wall St., NYC. Ph. DI 4-0137. Importers of "superb and rare teas for the connoisseur". They import in bulk and repackage, thus avoiding high duties on individual containers. Wide variety, prompt service, good tea. Around \$2.50 to \$3.00 per 1/2-lb.

Frank Drew, 2899 S. 6th St., Klamath Falls, Oregon 97601. Handles Western type clothes, including Pendleton-brand. Nice, many times somewhat expensive. Free catalog.

Martin B. Tittle
Ann Arbor, Michigan

Larry McCombs Suggests

I'd agree with Shaw that the Chicago *Manual of Style* is an excellent reference; it's devoted more to matters of usage and manuscript preparation, while Lee's book has a lot more info on how the printer actually turns your manuscript into a book. Half of the Chicago book is devoted to samples of various typefaces, which is extremely useful when you want to show the printer how something should look. I'd say they complement each other, and you really ought to have both; you need Lee to find out what they're talking about when they start asking you what kind of binding you want, or whether you need color separation, or other things that involve the actual book-making process, or when you're trying to figure out whether you can get the effect you want with offset.

U.S.G.S. also has fantastic aerial photos of lots of places; you can get monstrous blow-ups for next to nothing. This service is hard to get by mail, and may not be available at all of the Distribution Centers. You kind of have to go in and explain what you want, browse through indexes, look at sample prints, and then wait a couple of weeks while they make you a copy. If you dig 3-d maps, you ought to get a catalog from A. J. Nystrom of Chicago, who make many groovy things. Jeppeson & Co. makes a "natural color shaded relief map of the U. S." which is the best I've ever seen for getting a sense of the land (I haven't seen the one they sell, so I'm not sure what overprinting it has; the base map is the one that we used in our IDP earth science program, and it's gorgeous without any culture or political marks at all—this is what we started with!); \$2.50 each, with 10% discount on quantities of 10.

U. S. Geological Highway Map Series. American Association of Petroleum Geologists, P. O. Box 979, Tulsa, Oklahoma 74101. Set of 11 maps showing geology with highways and other cultural locating-yourself features, with cross-sections, physiographic maps, and diagrams on geologic history. Superb guides for figuring out what's been happening to the earth around the spot you're at; clear, concise, and should make sense to anybody. \$1 folded; \$1.50 rolled (I'm not sure whether that's the price per each or for the whole set; I assume the former).

Now here's a gadget that ought to be useful for something. It's called the Burgess De Luxe Vibra-Graver, and Ward's Natural Science Establishment, Box 1749, Monterey, CA 93940, lists it as a tool for chipping fossils out of the rocks; it has a tantalum carbide point which vibrates away at 7200 strokes per minute with adjustable stroke length; operates on 115-volt, 60-cycle AC. Costs \$12.95. A diamond point for tougher work costs an extra \$7.50. Now what could you do with that?

D. W. Brunton's Patent Pocket Transit. A marvelous precision gadget that includes a compass, level, clinometer, plumb, and alidade—you can use it for just about any kind of surveying that doesn't require tripod accuracy. It weighs 9 ounces, and closes up to a little indestructible metal package about 3" x 3" x 1". It costs about \$60, but it'll last a lifetime. I dropped mine off a 20-foot cliff one time, and it wasn't even scratched. Ward's carries this also, as would almost any supply house, I suppose.

Also for kids, I'd recommend a set of records by Jim Copp & Ed Brown on Playhouse Records (Box 36061, L.A. 36). They write their own stories and do all sorts of lovely sound effects. Enjoyable for little kids or adults; not at all condescending, and rather with it.

In addition to Sesame Street, anybody with access to Educational TV should dig Misterogers' Neighborhood. Rogers seems a bit oversincere and swishy at first, but after you've watched him for a while, you see that he's really being very straight with kids. His programs have a lot of sound psychology behind them, and are designed to help kids deal with the world without bombarding them with morals or preaching. For example, there's Mister McFeely, the Speedy Delivery Man, who is a character (how the hell do you spell that word anyhow?) of all the busy adults who never have time for anything, and King Friday the 13th who represents the pompous adult that always wants things done just according to the rules. The incidents create situations in which these people cause problems, and you see how all the other characters deal with them. There's a lot of emphasis on talking about feelings, and understanding why you get mad or sad, and how to dig it. Well, it's hard to describe, but I think this and Sesame Street (and perhaps Newsroom) are the only problems consistently worth watching on television, for kids or adults. Misterogers also has some records out of his songs on Small World Records (761 Two Gateway Center, Pittsburgh 15222). Very good.

Larry McCombs
Oakland, CA



Bat Glider Plans

Supplier: Quest Publishing Co.
P. O. Box 7115
Amarillo, Texas 79109

Additional Information:

These are plans for a *man carrying* glider for soaring down from the heights. I know nothing about these particular plans yet, but the concept is quite sound. (I am a senior aerospace engineering student.) If the military doesn't find me, I will build one of these gliders and write an evaluation for you. To quote a review in March, 1970 *Sport Flying*,

How about a glider for a total outlay of about \$20.00 cash? Well, if this sounds like fun, you might try this simple hand glider. It goes together in hours and will supply hours of endless fun. All you need is some bamboo or aluminum tubes, reinforced plastic tape, some plastic sheeting, and a gentle slope with a tad of breeze. A quick flying lesson is incorporated on the plans. Sounds like a gas for the adventurous. *No flying certificate required. [my italics]*

This must be the grooviest way to get high since Harry Anslinger discovered grass. Hope you can use the tip.

Stephen L. Addington,
Austin, Texas

Really!

I would like to suggest for inclusion in your catalog an organization entitled *Everything For Everybody*, 43 Eighth Ave., New York, N. Y. 10014.

If you want something done or want to do something—to hire someone or to find full or part time work—to buy or sell something—to find a place to live—in brief, if you want anything—there is one organization in the world that can do anything for anybody. That organization is *Everything for Everybody*.

Everybody with money, that is. Membership in this organization is \$5.00 a year or \$15.00 lifetime. After that you pay an additional fee when you get whatever it is that you want. This can be around \$10.00, sometimes higher, sometimes lower.

The organization has branches throughout the world and if you have the dough and want something that might otherwise be hard to get, *Everything for Everybody* is a good way to get what you want.

Thank you.

Scott Sparling
Jackson, Michigan

Sour Power

Look, I'm serious about this! Everybody's talking about the internal combustion engine and the pile-up of hydrocarbons. I've got an idea. Put out an all-points bulletin to all your practical physicists.

The electric car is practical except it has no regenerative power when in locomotion—right? O.K. —Take an empty 55 gal. drum, pour in 20 gal. of untreated water, 60 lbs. sugar, the required nutrients to induce a healthy fermentation, add a good high tolerance yeast and then through a small port in the upper side or top connect it through a pinhole port to a turbine or miniature steam-type engine which is in turn connected to a generator to regenerate the batteries of the electric motor.

Sit down and slowly read the 128 pages of the Upanishads by Mentor Classics. If this takes you 24 hours at a temperature of 70° and your generator isn't turning, something is wrong with the fermentation.

If the motor is turning fast, stand back—the damn thing might blow up!

Joe Keenan
Placerville, CA

Paul Bandy Suggests, Beautifully

We got the Fall '69 edition of your catalogue a few weeks ago and are very much pleased. We read it instead of a newspaper. I have thought of a few items that I think will enrich its pages. I am enclosing three reviews, the Spanish Mustang Horse, *Breaking and Training the Stock Horse*, *Desert Plants and People*. I hope you will find room for them in the next issue.

THE SPANISH MUSTANG HORSE

For anyone who needs a good, tough, dependable, intelligent, quick, sure-footed, little horse, the Spanish Mustang is the answer.

The horse of the Spanish conquerors, Indian pony, and original wild horse has suffered as bad a fate as his native American masters. Castrated, crossbred and shot for dog food, he is almost extinct. There is now a registry, founded by Bob and Ferdinand Brislawn, for the preservation of the mustang horse. Most of the foundation stock was caught wild in remote areas or found on Indian reservations.

They are small horses (12 to 14.2 hands). Their speed, endurance, and ability to withstand hard winters on little food is legendary. One Mustang, Yellow Fox, won the 100 mile Bitterroot, Montana, endurance ride at age eighteen. They come in conventional colors—bay, sorrel, black, chestnut—and in many others—blue and red roan, medicine hat, grulla, bluecorn, buckskin, claybank, overo paint, steeldust . . .

They make good pack, cart, children, saddle, or even light plow horses. Mustangs are priced from cheap (\$100 to \$150 for a registered colt) to expensive, depending on the breeder. Most breeders are old-timers and reasonable. We bought three last year in Wyoming and are very well satisfied. They are remarkably fast learners.

For information and breeders list write:

Information Headquarters
Bob Racicot, Exec. Secretary
Box 26, Thompson Falls, Montana 59873

Letter Writing — in every tongue for any purpose
Lettering — signs, fabrics, invitations
Library Research — any subject, anyplace, anytime
Linoleum Layers — home or office

Old Age — guidance consultants
Orchestras & Bands — private parties & commercial
Organization — if able to be — we can

Theater — personnel, locations, props
Time of Day — when you wonder — call
Tours — to everywhere — walk, bike, bus, boat, plane

Wives — for would-be husbands
Window — cleaning — commercial & residential
Window Guards — gates, locks — installed
Writers — for every imaginable assignment
Zzzzz — which means we do everything for everybody

Origami

I would like to suggest Sam and Jean Randlett's two books on Origami: *The Art of Origami*, and *The Best of Origami*, both published by E. P. Dutton and Co., New York. "Art" was published in 1961, and "Best" a couple of years later. Also highly recommended is a little monthly publication put out by Sam called "The Flapping Bird", back issues and maybe some new ones available from Jay Marshall, 5082 N. Lincoln Avenue, Chicago, Illinois 60625. Sam is a remarkable man; he knows all the best paper-folders in this and several other countries and best of all he can teach how to fold paper. The illustrations by Jean (who died last year) are remarkably easy to follow. I've seen some examples of origami at Sam's house that are simply unbelievably complex and beautiful. The two books contain photographs of the better ones, taken by Sam, plus instructions for folding those that don't require six extra fingers and a twisted concept of space. Great way to spend time when the TV is busted. The books are about \$6.00, the Mag \$6/year.

Yours truly,
William T. Powers
Northbrook, Ill.



Also: *Breaking and Training the Stock Horse* by Charles O. Williamson, \$7.50 from the Caxton Printers, Ltd., Caldwell, Idaho 83605, or from Charles O. Williamson, Hamilton, Montana 59840

Desert Plants and People, by Sam Hicks. \$5.95 from The Naylor Company, 1015 Culebra, San Antonio, Texas 78201.

Paul Bandy
Blanco, Texas



Kamawi, No. 115, black stallion

"His qualities are complete. Now he looks anxious; now to be losing the way; now to be forgetting himself. Such a horse prances along, or rushes on, spurning the dust and not knowing where he is."

Chuang-Tzu, Book XXIV, Part III, Section II, I
Trans. James Legge

P. O. Envelopes

For your next Supplement you might want to include the information that the United States Post Office, through local post offices, will sell you stamped envelopes imprinted neatly (see ours) with your name and address, maximum four lines, plenty of letters per line. The cost is just a little over a penny for envelope and printing. Orders must be in lots of 500, and may be for air mail, surface, legal size or regular, and even window envelopes, the latter probably a bit more expensive. You must pay in advance and expect to wait four to five weeks for delivery to your door by your postman. 500 legal size (No. 10) envelopes with six cent stamps, imprinted with name and address, costs \$36.45, or just under 7.3¢ per envelope. One No. 10 6¢ envelope without printing costs 8¢ from the same postmaster.

Love,
Bob Aitken
Haibu, Hawaii

HRAF

Human Relations Area Files, Inc. (HRAF)
Box 2054 Yale Station
New Haven, Conn. 06520

sells documents from the world of the social sciences, some of which could be useful to people who like to research their trips before they take them. In this respect the bibliographies are best. For example, Murdock's *Ethnographic Bibliography on North America*, in which can be found a nearly complete listing of all materials published before 1960 on the Indians of North America north of Mexico, including plenty of material on the use of plants, the preparation of shell fish, domicile structure and design, organized by culture group, which is to say, regionally and locally. If you live in north eastern Utah or Watertown, NY, there is something for you. HRAF also has bibliographies on Indonesia, Siberia, the Middle East, South America, Afghanistan, the Circum-Mediterranean peasantry and Europe. Murdock's book sells for \$9.00.

Thanks,

Barry S. Kast
Buffalo, N. Y.

Dropping Out, etc.

Many of us who have "dropped out" in the search for alternatives have no way of paying for the publication tools and learning ploughshares necessary to building, even the Whole Earth Catalogue. While books such as *Tantra Art* are magnificent, I have all but forgotten what colour a Canadian \$32.50 bill looks like. Very often, if you write a few paragraphs to a publisher or distributor or the editor of a periodical (make it neat, typed, straight and loving—you are being done a service) telling what you are about, why and who for you want to write a review of the book (making absolutely certain the book has not already been reviewed in that publication—publishers have publicity depts.), you can receive a complimentary review copy, even if the book is several years old. Books always have a certain number of copies allotted to be sent to reviewers (around 100 to 200 copies, usually), so it is better to get to the publisher right at publication, although there may be some left over. You don't need to check with the periodical you wish to review for; it is better to submit a review unsolicited. If they accept your review, rather than take money as payment, particularly with smaller and more radical publications, ask for an exchange subscription. That is real sharing of resources: you get a groovy book and another periodical you have to read, a publisher, usually deserving, gets some good publicity, his author gets some nice royalties, a needy periodical gets a worthwhile review (you have to judge that) promoting its circulation and bettering its content, and lots of nice people learn about a groovy book. But do the review you said you would unless the book is bad; if it is, write and tell the publisher. He'll thank you, but he may ask for the book back, but if it's such a bad book, well, you don't want it anyway. Dig it.

ON ALTERNATIVE ECONOMY:

The Sharing Plan (Mary Kae Josh, 4522 Pine, Philadelphia, PA 19143), of which we are a part is small and came out of the peacemakers orientation program in nonviolence in 1966, but is looking to develop regionally. Each applicant must be recommended and approved by all members. Voluntary contributions by all provide a fund for any contingency of any member, having percentage to withdraw, without paying it back until surplus exists. It works for us; problem is getting people to use it rather than just have it there. Write for details.

ON FEEDING THE POOR AND HUNGRY

As vegetarians, we have found *International Vegetarian Cookery* by Sonyar Ichmund (\$1.75 from Arco Publishing Company, 219 Park Avenue South, New York, New York 10003) to be the best for staple, simple and delicious fare requiring no exotic ingredients. The dishes are sumptuous and inexpensive.

You will find, as we have, that books such as *The Yoga Cookbook* and *The Natural Foods Cookbook* by Beatrice Trum Hunter (\$9.95 from Pyramid publications, 444 Madison Avenue, New York, New York 10022) are a little bit esoteric and heavy for people with real stomachs who cannot spend all their time foraging for food.

We wish to correspond with people about building change, about prisons (all kinds) and the draft, and will counsel anyone by mail, so please include our address.

Thanks.

In Peace and Life,
Frances and C. J. Hinke
26 Hounslow Avenue
Willowdale, 444
Ontario, CANADA

The Economy of Cities

I think Jane Jacobs' *The Economy of Cities* should be listed in the catalogue. It could go under Understanding Whole Systems, Shelter and Land Use, or Community.

This is a psychedelic book: it expands your consciousness by banishing silly ideas from the switch-mechanisms of your head. All kinds of official truths—the idea that cities grow on an agricultural base, rather than being necessary to the improvement of agriculture, for instance—crude notions that get in the way of clear thought simply vanish as you read the book.

What becomes clear from the book is that our cities aren't messed up because of stupidity or shortsightedness. They are fouled up by efficient administration and diligent intelligent planning, all working on nutty ideas of how the world works. Rent control in New York, for instance, is based on the premise that high rents are bad, an idea that ignores the common sense proposition that high rents can only proceed where somebody wants to pay them.

Peace,
David Lloyd-Jones
New York, N. Y.

Physicians' Desk Reference

I'd like to suggest an additional item for THE WHOLE EARTH CATALOG and will include a review since I've been a subscriber to this for 10 years—*Physicians' Desk Reference (PDR)*. It is a compilation of information from all the pharmaceutical houses, \$7.50 from Medical Economics, Inc., c/o Litton Publications, Inc., Oradell, N. J. 07649

When your doctor prescribes a drug, he usually doesn't have time to warn you that occasionally it has weird side-effects or that you shouldn't take it along with certain other drugs, or that (for example) it has a chemical reaction with aged cheeses, wine and beer that will cause a dangerous rise in blood pressure.

With the PDR, as they call it, all you need is the name of the drug. Look it up in the front pink index and turn to the right page. You'll find a listing of the various forms and strengths of the drug. This is followed by everything that's known about the drug: Description, indications for needing it, reasons for NOT prescribing it, warnings, precautions, adverse reactions, dosages, overdoses—the whole works.

Although it's written in medical terminology, a layman can skip the chemistry parts and make an awful lot of sense of it. For example, some drugs give some people nightmares—how would you know where those nightmares came from if the book didn't tell you?

In case you don't know the name of your pill or capsule, there's another section where most of these are photographed full-size in color. You usually can match up your drug with these illustrations and then look up further information.

The PDR brings out an up-to-date edition each year and sends supplements between editions to keep you up-to-date on revisions and corrections.

Hope this is useful.
Edith Coogler
Atlanta, GA

The Parable of the Beast

Enclosed is a review of *The Parable of the Beast*, by John N. Bleibtreu, something I thought would go very well in the catalog, especially as you appear to think so highly of Dubos' *Man Adapting*. Anyway, here it is, I hope you can use it in some way, shape, or form.

Sincerely yours,
David B. Schwartz
Sarasota, Florida

Man's basic nature, for the most part forgotten in this age, is the subject of this very fine and enlightening book. Similar to Rene Dubos' *Man Adapting*, it is in the style of an overview, a synthesis of a great deal of biological information concerning man into a coherent whole. It is unusual to me in that it is neither a dry scientific exposition nor the too-often published pseudo-scientific phantasies of a dramatist. A noteworthy exception, it is well-documented science in the spirit of philosophy which reads like a novel.

"The voice of the turtle is heard in the land, heard in all the arts—in literature, painting, and music—and in the voices of men and women speaking to one another. It is not the sound of the dove, that sweet and melancholy sound which translators of the Authorized Version presumably had in mind; it is the croak of isolation issuing from within a vault of defensive armor—the voice of the reptilian turtle. This armor we wear—the armor of technology separating us from the rest of the natural world—has created us lately in the condition of exiles. Nature exists within as well as without, and we are become, therefore, exiled from ourselves. The style of the catatonic has become the style of Everyman."



Brain Food...

Earth Rape, with optimism

The Red Book Wildlife in Danger

by James Fisher, Noel Simon, Jack Vincent and others from: Collins, St. James' Place, London, 1969 or directly from: International Union for Conservation of Nature and Natural Resources: IUCN, 1110 Morges—Switzerland. About 10.00\$ (70 shillings)

(Introduction, p. 19) "But the main battle is now, beyond any doubt, in the ecological field of habitat maintenance. It can of course be truly said that ever since New Stone Age times man has altered his environment deeply, with his power to cut down forests and drain wetlands. When the first men shortly reach the moon, they will probably be able to see the forest slashes of the last century with the naked eye, so accelerated have been the environmental changes of the Industrial Age." I'm not sure the lads on the moon trip did see environmental changes like forest slashes, but I can recommend the book highly for anyone seriously interested in conservation.

Tristes Tropiques

by Claude Levi-Strauss. \$2.45 from Atheneum, 122 East 42nd Street, New York, N. Y. 10017.

"These considerations have carried me a long way from the preparations for my expedition into the western Mato Grosso. But they were indispensable if I was to give the reader an idea of the intense excitement which attaches to all American studies, whether on the archaeological or the anthropological level. Such is the scale of the problems, so narrow and so precarious are the paths hitherto trodden, so final the annihilation of tract after tract of the past, and so uncertain the bases of our speculations, that even the briefest reconnaissance on the terrain plunges the enquirer into a state of indecision, in which feelings of humble resignation fight for supremacy with moments of the insanest ambition. He knows that the essentials have gone for ever and all that he can do is to scratch the surface. Yet may he not stumble on some indication, preserved as if by a miracle, which will shed new light upon the whole problem? Nothing is possible: everything, therefore, is possible." The book is strong on meaningful ritual, town planning, clear, delicate, precise thinking, motivations of anthropologists.

Douglass Branch
Caracas, Venezuela

Bleibtreu constantly draws parallels between humanoid and lower-species behavior, even at a microscopic level;

"It is also curious that in the slime molds the individual members of the community that form the leadership group are nonreproductive. . . . This is curious, for it has a relationship to human societies; it overlaps the evidence of most vertebrate communities where the dominant animals, particularly males, have greater sexual opportunities and generally pass on their genetic characteristics differently—in a larger statistical degree, than low ranking, non-dominant individuals. Often in Human societies many of the most valuable members are non-reproductive; members of celibate religious orders, ascetics, homosexuals, and so on. Reproduction flourishes on the lower levels of societal competence, the marginal members of ten reproduce disproportionately large numbers of themselves."

Many people when they read this book report amazedly that Bleibtreu talks about everything. This is close to the truth. From DNA, to cannibalism, circadian rhythms, population, disease, territorial behavior, serotonin and LSD, to Karma, he integrates, in wonderful style and detail, all the biological investigation on humans and their world that he feels it is important for us to be aware of. It is a commendable achievement.

The Parable of the Beast

1969; 304 pp.
\$1.50 postpaid

from:
Collier Books
The Macmillan Co.
Order Department
Front & Brown Streets
Riverside, N. J. 08075

Lyle Burkhead sure knows math

If you want math books of general interest, to be used for recreation or meditation, you might consider these:

(1) W. Ross Ashby, *An Introduction to Cybernetics*. This is the best introduction to the subject. It helps to have studied linear algebra, but it isn't necessary. Does not presuppose knowledge of calculus or electronics.

(2) Courant and Robbins, *What is Mathematics?* A book for people who would find out what music is by listening to Bach, not by reading an encyclopedia of music.

(3) Coxeter, *Introduction to Geometry*. All kinds of geometry—projective, non-Euclidean, algebraic (plane groups, crystallographic groups), etc.

(4) Spivak, *Calculus*. A recent book that has been enthusiastically received by the mathematics community. Presupposes knowledge of analytic geometry. Pure math, no applications. Has a superb list of suggested books for further reading.

If you want math books that really are tools, consider who would need them, what kind of tools they would need, and why.

People who use only precollege math—algebra, trig, analytic geometry—don't need help from the Catalog. They can get started by taking high school or junior college courses and reading the standard texts, and then work things out for themselves.

Problems begin with people who are working with intermediate or advanced physics, chemistry, electronics, and economics. They need to know calculus at least, and probably linear algebra and advanced calculus as well. These subjects are almost always badly taught, and it's a slow job working them out for oneself. There's nothing the Catalog can do about bad teaching, but you could help a lot by recommending some decent textbooks. For instance:

(1) Richard Courant, *Differential and Integral Calculus*, two vols. Infinitely better than the books used in engineering calculus courses; vastly better than the books used in courses for math majors, except honors courses using Apostol or Spivak. Has nothing about "infinitesimals" and a sensible, cautious treatment of differentials. Has whole chapters devoted to applications. This book is a classic, and is widely known and respected by mathematicians, scientists, and engineers—but everybody has to hear about it for the first time.

(2) School Mathematics Study Group (SMSG), *Introduction to Matrix Algebra*. The SMSG is where the "new math" came from, and this book is one of their best efforts. Everyone who needs to learn about matrices should have it. Chapter 5 is especially valuable if you want to know what eigenvalues and eigenvectors are.

(3) Nering, *Linear Algebra and Matrix Theory*. This can be used as a sequel to the SMSG book. It has a clear development of the theory and a long chapter on applications at the end.

(4) Buck, *Advanced Calculus*. Overlaps somewhat with vol 2 of Courant but has a different emphasis and viewpoint. Has more algebra and topology—a more complete treatment of differentiation a generally more abstract and modern style but still pays plenty of attention to applications.

Someone who has studied these four books can take care of himself mathematically in almost any circumstances.

Lyle Burkhead
Los Altos CA

P. S. Two other books that ought to be listed: The Feynman Lectures on physics (everybody has to hear about this for the first time, too) and Crawford's *Waves*, vol 3 of the Berkeley Physics Course.

Also *The God of the Machine* by Isabel Paterson (reviewed in *The Objectivist Newsletter* three or four years ago).

And Klein's *Elementary Mathematics from an Advanced Standpoint. Vol. I: Arithmetic, Algebra, Analysis. Vol. II: Geometry*. Dover Publications, 180 Varick Street, New York, N. Y. 10014. This book should be considered as a companion to Courant's *Calculus*. It is the only survey of mathematics I've seen that really deserves to be called a "tool".

Charles Fort

SUGGESTION FOR WHOLE EARTH CATALOG

Name of item: The Books of Charles Fort. 4 volumes: *The Book of the Damned; New Lands; Lo!; and Wild Talents*. from: Ace Books, 1120 Avenue of the Americas, New York, N. Y. 10036

Review: Reading Charles Fort (1874-1932) is like getting a foretaste of Buckminster Fuller, so I asked Fuller if he had known Fort. He hadn't, but it turns out he was writing the introduction to Damon Knight's forthcoming biography of Fort. Ace has recently reprinted Fort's works in paperback; they are stacked with the psychic-and-saucer books. But don't overlook Fort. Each of his books is laden with reports of unorthodox, widely recurrent, phenomena—but he uses the material as a tongue-in-cheek, comprehensive philosopher. He throws galactic theories at you like paper airplanes, laughing at himself as often as at dogmatic orthodoxy. Some examples of his style:

Much of the argument in this book will depend upon our acceptance that nothing in our existence is real. The Whole may be Realness.

—Wild Talents

Mineral specimens now in museums—calcites that are piles of petals—or that long ago were the rough notes of a rose.

An early stage within the shell of an egg—and a protoplasmic line of growth feels out through surrounding substance—and of itself it is lost. Nourishment and protection and guidance come to it from the whole.

Or occasional falls of "manna", to this day, in Asia Minor, may be only one factor in a wider continuance. . . .

—LO!

Gene Keyes
Carbondale, Ill.

The Rise of the West

The Rise of the West: A History of the Human Community by W. H. McNeill. \$1.65. A Mentor Book: The New American Library Inc., 1301 Avenue of the Americas, New York, N. Y. 10019

Review:

It's a rare book that treats our species 1) comprehensively and 2) as a continuum. McNeill's concern is with all the doings of human society from 4000 B.C. to the present. Everything that is known about the causes, dynamics, and outcomes of the sequence of cultures is here, coherent and lucid.

The sub-title describes the book more accurately than the title, since McNeill is not solely interested in the West. The accounts of Indian and Chinese civilization are full. However, the book is weak on African and Amerindian cultures.

Everything you might want to know about how NATO culture got to the top of the heap, and what preceding cultures were like, is here for the reading. History as an extra-terrestrial observer might write it, if he had a good command of the language.

Thus larger populations, will all the possibilities of specialization and social differentiation which numbers permit, could only be sustained by human communities that found ways of escaping from the natural limits imposed by their predatory past. This [farming] constituted perhaps the most basic of all human revolutions. . . . The costs were real, however; for the tedious labor of tilling the fields was a poor substitute for the fierce joys, sharp exertions, and instinctive satisfactions of the hunt.

Civilizations may be likened to mountain ranges, rising through aeons of geologic time, only to have the forces of erosion slowly but ineluctably nibble them down to the level of their surroundings.

Save in a loose and metaphorical sense, the people never really controlled "their" government in the United States or anywhere else, despite the fact that in the days of Jefferson and Jackson, official powers and duties were restricted and the recognized political alternatives were narrowly defined by nineteenth-century liberal principles.

Jib Fowles
New York, N. Y.

Chemical Abstracts

The Chemical Abstracts: world's best technological index and abstracting service. Very comprehensive. If other fields did this, you could find anything. See a good library.

Laurence Ista
Seattle, Wash.

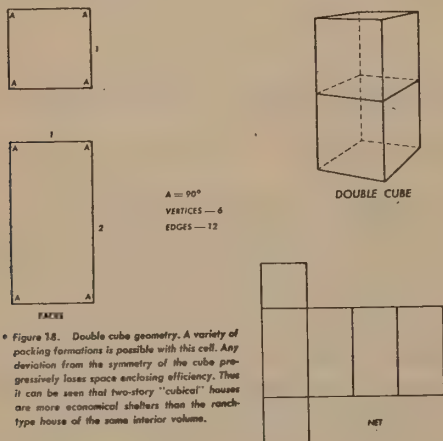


Figure 18. Double cube geometry. A variety of packing formations is possible with this cell. Any deviation from the symmetry of the cube progressively loses space enclosing efficiency. Thus it can be seen that two-story "cubical" houses are more economical shelters than the ranch-type house of the same interior volume.

Space Enclosure Systems

Space Enclosure Systems, by Donald G. Wood. \$3.50 from University Publications Sales Office, Ohio State University, Columbus, Ohio 43210

Review:

subtitled "identification and documentation of cell geometries", wood's book presents both tabulated and graphic analysis of twenty-three volumetric geometrical forms, or, as he more effectively describes them, "space enclosure systems". the result is a beautiful, clear cut little TOOL that can liberate the designer, architect, educator, sculptor, mathematician, and ambitious spirit.

wood has taken this presentation just far enough. his information is formal, clear, simple, good and useful. what stimulates appreciation for what he has presented is what he has omitted. the book is void of the cliché "author's sketches" of possible futuristic applications that too often infringe or undermine the user's imaginative potential. wood allows the application of his data to be the reader/user's choice and opportunity.

thomas casey
Austin, Texas

Psionics

Psionics deals in meditation machines, this is my phrase not theirs. ETC or Electronic Techniques for Centering, models I, II, and III, are their current products. Several explanatory references are "Conscious Control of Brainwaves" in the April '68 *Psychology Today* and the last three chapters of *Altered States of Consciousness* edited by Charles Tart.

Essentially, ETC is a self-instructional tool-technique for the attainment of expanded states of consciousness. With ETC one may learn the sustained alpha state. I have been using ETC for several months and have not yet begun to tap its potential.

ETC I changes the received brainwaves into a continually audible tone. With practice one may change this tone from the normally irregular, low volume tone to a high volume, even-toned signal so it acts as an electronic mantra. Don't let the machinery fool you though, it merely acts as a translator; you do the work.

ETC II includes the features of ETC I and in addition has an audible tone which is relay-actuated by the sustained alpha state. This state is exhibited by zen monks and yogis while meditating.

ETC III with all the features of models I and II also has a tape player and other features. As one successfully attains the alpha state, a preselected tape is heard. Much more pleasant to use.

Psionics doesn't require but strongly recommends that models II and III be purchased following an interview or comprehensive correspondence. ETC I is readily available—price \$150.00. ETC II is \$150.00. ETC III is semi-indeterminately priced at \$500.00. Batteries not included. Allow four weeks for delivery. Write to or order from: Psionics, P.O. Box 1919, Boulder, Colorado 80302.

Bob Hamilton
Nederland, Colo.

The Hubble Atlas of Galaxies

This book is a series of superb photographs which is the definition of Edwin Hubble's classification of galaxies. Galaxies come in a variety of shapes from round blurry ones through the familiar spiral in Andromeda to fantastic blazing pinwheels like M101.

Hubble has lined them up in a sequence according to shape. The meaning of this sequence has not yet been determined. It may indicate a series of stages in the life on one galaxy which progresses from blurred youngster to majestic spiral or vice versa. More likely vice versa, since the spirals contain hot young blue stars which we know will burn out in a few million years or so, while the blurry ones contain many ancient red giants. It is also possible that the sequence is not an age sequence at all, but merely reflects conditions at that place in the universe when that galaxy was formed.

But besides being a tool for scientists, this book is like a guided tour through our own miraculous universe. When this planet gets you down, leaf through the Atlas and feast your spirit on galaxy after galaxy, as beautiful and varied as snow flakes. Some galaxies are so far away that the graininess of the photograph shows in the blow up. Some photographs show small blurred objects in the background which you suddenly realize are more galaxies.

My own reaction to this book is not to feel lost or insignificant, but instead to feel immensely grateful to be able to inhabit such a universe, and to agree with Fred Hogle that every time we find out more about this universe it turns out to be richer and more complex and more beautiful than we could ever have thought up ourselves.

The price is a mere \$10. I think this includes postage unless you are in a hurry in which case they will send it airmail for \$2.50 more. From the Carnegie Institute, Washington, D.C.

Jenny deupree
Davis, CA

Stephan Chodorov Suggests

The Hallucinogens (By A. Hoffer and H. Osmond. Academic Press, 111 Fifth Avenue, New York City).

You wouldn't nose out onto the freeway if you didn't know how to drive, and you damn well shouldn't go playing "eat me" and "drink me" unless you know what you're about. Here, in a book ostensibly for the medical profession, is the whole story to date. Hoffer and Osmond know more about this field than anyone else in the world, and their aim is to investigate it further. Osmond is one of the unsung sages of our times, working quietly in his own way to find out the nature of human nature. (He is a leading researcher into schizophrenia, the coiner of the word "psychedelic", the doctor who gave Huxley his mescaline, and is into a hundred other interesting things, including the reliability of the Jungian personality types. There are at least a few pages on every hallucinogen you've ever heard of, and on a lot you haven't; eg: the "dream fish" *kyphosus fuscus*, and the plants the ancient Norse used to induce the state of "berserk" (and why it became, among themselves, illegal.) Where previous experimenters have used themselves as guinea-pigs, their diaries are reprinted, eg.: Wasson's trips with *psilocyba* mushrooms. In most cases, Osmond has tried the stuff himself; and he is a very patient, understanding and aware guinea-pig indeed. For people who remember their college chemistry, the molecular diagrams are here, for people who want to read more an exhaustive index shows you the way. This is a source book of knowledge, but by the by Osmond has two main observations of a philosophical nature: 1) man has been looking for hallucinogens from the beginning, and has been finding them, and 2) you don't get something for nothing. You can believe this man; he has smoked with the best of them, and popped things into his mouth that haven't been tried in a few centuries.

Warning: not reading this book may be injurious to your health.

Living the Good Life (By Scott Nearing and Helen Nearing. Social Science Institute, Harborside, Maine. \$5)

Some decades ago Scott Nearing gave up as an academic and retreated to the Vermont woods, where he promptly began to rediscover for himself how to stay alive in the North Temperate Zone. His advice is in this book. He invented a method for building stone houses very cheaply, he perfected a way of living into the winter on crops taken in the summer from ingeniously constructed gardens, and he relied—perhaps more than anyone today will care to rely—on a division of his labors between the hands and the head. He was a one-man community. He never wasted anything (it will drive you mad to hear his paens of praise for used motor oil), he tried to ignore machines wherever possible, he tried to live on a cash-less basis (and largely succeeded), and he annoyed his old-timey Vermont neighbors by living in a more down-to-earth life than they ever

ARP Synthesizer

A fresh approach has been taken in the design of the ARP synthesizer, and it incorporates many unique features which enhance its power as an educational and music composition tool.

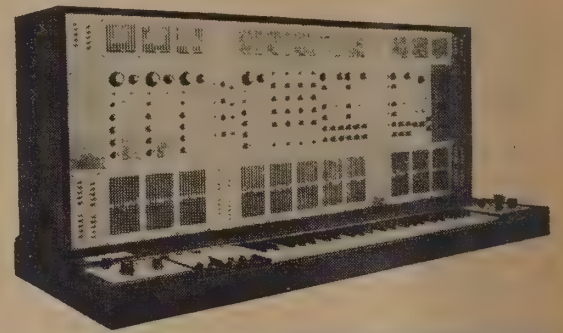
The price range will fall between about \$3500. and \$9500. depending upon the choice and configuration of functional modules.

We expect to be in full production by mid summer with several custom systems being sold prior to that time.

Information from Tonus, Inc., 45 Kenneth Street, Newton Highlands, Mass. 02161.

Tonus, Inc. is pleased to announce the development of the new ARP Synthesizer, an evolutionary milestone in equipment for the synthesis and performance of electronic music. The ARP is the first true "Second Generation" synthesizer incorporating all of the separate advances in synthesizer design of the last five years as well as many important innovations. The ARP Synthesizer is designed as a no-compromise, state-of-the-art system to insure quality consistent with the demands of the most discriminating composers and performers.

In approaching the design of a new Electronic Music Synthesizer, the twin objectives of improved performance and greater control flexibility have been stressed. Unique, proprietary circuits and extensive use of digital and linear I.C.'s have been combined to produce laboratory quality modules. Both stability and control range have been vastly improved over earlier systems of other makes.



Science & Sanity

Science & Sanity—an Introduction to Non-Aristotelian Systems and General Semantics, by Alfred Korzybski. \$12.00 from The Institute of General Semantics, Lakeville, Conn.

Korzybski aims to help you train yourself in new semantic reactions: literally to get your head—and your whole nervous system—together. All too often we think and speak in ways that are structurally false to the events we are trying to describe, analyze, and deal with, ways that are harmful to our ability to function semantically. We use artificial aristotelian divisions such as body vs mind, objective vs subjective, and ignore half a century's work in physics by operating on Newtonian assumptions.

Korzybski conceives all knowledge in terms of the functional structure of your nervous system, and he explores the consequences of this idea in Physics, Math, Chemistry, Neurology, "Psychology" and Education. Synthesis of this approach with newer ecological studies should provide a real start toward a gestalt understanding of the universe.

C. Baird Brown
Keene Valley, N. Y.

could and showing them how to maple-sugar and farm. He beat them at their own game, and for thirty years it lasted—until the ski crowds began to turn utopia into suburbia. Nearing fled to Maine where, presumably, he's started all over again. Lots of savvy advice in here, and a good picture of how it works in practice to turn your back on advantages that you know are right out there waiting for you. Nutrition freaks will find the Nearing diet a new challenge. Nearing is no spring chicken, and so if nothing else this book will shame you into getting up and getting moving.

ETS. E. DEHILLERIN. There are kitchen-equipment freaks, just as there are stationery freaks, and we should indulge them. Dehillerin indulges them beautifully (and, by the time you finish paying the freight, expensively). But write to 18 Rue Coquilliere, Paris, and see what happens. Sieves, grinders, broilers, boilers, whisks, spatulas, deep pots, shallow pots—anything you have ever wanted is there. They'll send out a kind of packet of loose pictures that looks like a child's alphabet primer.

GOLDSMITH BROTHERS. For stationery freaks, and anyone who needs exactly that certain file-divider or paper-fastener comes the greatest name in the east! Goldsmith Brothers. Free catalogue on request, and they will ship. 77 Nassau Street, New York City 10008.

PURPLE MARTIN CAPITAL NEWS. The camp gift subscription. A monthly tabloid newspaper about the purple Martin, its bug-eating proclivities and general all-around usefulness. Published with all the heart in the world by the Griggsville (Illinois) Wild Bird Society. If you have a soft spot in your head for the Martin, you can't be without this. Actually, since it's ecology-minded and on the side of furry creatures, it is Good, and you won't feel silly sending them 25¢ for a sample copy. But you might feel silly getting it every month and they won't, probably, send it in a plain paper wrapper.

Psychological Exercises (By A. R. Orage. Recently reprinted but English edition available, too.)

Orage, who edited "New Age" in the 'thirties, knew everyone. His favorites, like Pound, Gurdjieff and Ouspensky, were certainly worth knowing. Those were the days when intellectuals thought they could change the world just by pointing out what was right and what was wrong. Hah! Anyway, Orage had a secret kick, too, and it was exercising the grey matter. For example: while reciting "Jack and Jill" write down "Mary Had a Little Lamb". For example: while you are talking to someone, or reading this, count from 100 to 0 backwards by three's. You'll find that with some practice you really can do these things, just like learning to pat your stomach while rubbing your head. And then were are you? Fun.

Yours truly,
Stephan Chodorov
New Milford, Conn.

Far Out

Brothers,

Enclosed is a book list for all interested in open, free, anarchic, holistic education—as well as behavior change technology that works. Those marked are anecdotal, practical, and excellent guides to both the problems of cranky schools and communes. *The Peckham Experiment*, Pearse & Crocker, was probably the answer to it all.

GREEN VALLEY SCHOOL RECOMMENDED READING LIST

*Ashton-Warner, S., *Teacher*, Simon and Schuster, New York, 1963
 Astrup, C., *Pavlovian Psychiatry*, Charles Thomas, Springfield, Illinois, 1965
 *Bazely, E., *Homer Lane and the Little Commonwealth*, Schocken, New York, 1969
 Beck, J., *How to Raise a Brighter Child*, Simon and Schuster, New York, 1967
 *Burn, M., *Mr. Lyward's Answer*, Hamish Hamilton, London, 1956
 Chall, J., *Learning to Read*, Grolier, New York, 1967
 Coleman, M., *Adolescents and the Schools*, Basic Books, New York, 1965
 Dennison, G., *Lives of Children*, Pantheon, New York, 1969
 Engleman, S. & T., *Give Your Child a Superior Mind*, Simon & Schuster, 1966
 Franks, C., *Conditioning Techniques*, Springer Publications, New York, 1964
 Friedenber, E., *Coming of Age in America*, Random House, New York
Dignity of Youth and Other Atavisms, Beacon, Boston, 1965
 *George, W., *The Junior Republic*, D. Appleton & Company, New York, 1909
 Ginnot, H., *Between Parent and Child*, Macmillan, New York, 1965
 Goffman, E., *Asylums*, Doubleday, Garden City, New York, 1961
 Goodman, P., *Growing Up Absurd*, Random House, New York
Compulsory Miseducation
Utopian Essays
Community of Scholars
 *Hemming, J., *Teach Them to Live*, Longmans, Gram & Company, London, 1952
 *Holmes, G., *The Idiot Teacher*, Faber and Faber, London, 1952
 Holt, J., *How Children Fail*, Pitman, New York, 1964
How Children Learn
The Underachieving School
 Ilg and Ames, *School Readiness*, Holt and Rinehart, New York, 1965
 Illingsworth and Illingsworth, *Lessons from Childhood*, Livingston, London, 1966
 *Jones, H., *Reluctant Rebels*, Tavistock, London, 1960
 Klotz, S., *Guide to Modern Medical Care*, Scribners, New York, 1965
 *Kohl, H., *The Open Classroom*, New York Review, New York, 1969
Teaching the Unteachable
36 Children
 Koerner, J., *The Miseducation of American Teachers*, Pelican, New York, 1965
 Kozel, J., *Death at an Early Age*, Bantam, New York, 1968
 Krumholz and Thorensen, *Behavioral Counseling: Cases and Techniques*, Holt, Rinehart, and Winston, New York 1969
 *Lane, H., *Talks to Parents and Teachers*, Schocken, New York 1969
 London, P., *Behavioral Counseling*
 London, P., *Behavior Control*, Harper and Row, 1969
Modes and Morals in Psychotherapy, Holt, Rinehart, and Winston, New York, 1964

MacKenzie, R., *The Sins of the Children*, Collins, London, 1965
Escape from the Children, 1965
A Question of Living, 1963
 *Neill, A. S., *Summerhill: A Radical Approach to Child Rearing*, Hart, New York, 1960
Freedom, Not License
 *Makarenko, A., *Road to Life*, Foreign Language Publications, Moscow, 1951
A Book for Parents, 1954
Learning to Live, 1953
 *Pearse and Crocker, *The Peckham Experiment*, Allen and Unwin, London, 1947
 Richardson, E., *In the Early World*, Pantheon, 1969
 Salter, A., *Conditioned Reflex Therapy*, Capricorn, New Jersey, 1961
 Scrimshaw and Gordon, *Malnutrition, Learning and Behavior*, MIT, Cambridge, 1968
 Spiel, O., *Discipline without Punishment*, Faber and Faber, London, 1962
 Trace, A., *Reading without Dick and Jane*, Regnery, Chicago, 1965
 Ullman and Krasner, *Case Studies in Behavior Modification*, Holt, Rinehart, and Winston, 1965
 Ullman and Krasner, *A Psychological Approach to Abnormal Behavior*, Prentice-Hall, Englewood Cliffs, New Jersey, 1969
 von Hilseheimer, *Is There a Science of Behavior?*, Humanitas, Orange City, 1967
 Watson, J. B., *Behaviorism*, Phoenix, Chicago, 1963
 *Wills, D., *Throw Away Thy Rod*, Gollanz, London, 1960
Homer Lane: A Biography, Allen and Unwin, London, 1964
 Wolpe, J., *Psychotherapy By Reciprocal Inhibition*, Stanford University Press, 1958
 Wolpe and Renya, *Behavior Therapy and Experimental Psychiatry*, Pergamon, New York, 1969
 Wolpe and Lazarus, *Behavior Therapy Techniques*, Pergamon, 1966
 Wolpe, Salter, Renya, *The Conditioning Therapies*, Holt, Rinehart, and Winston, New York, 1965

I doan see in the nonCATALOG any mention of

FREEDOM PRESS
 18a Whitechapel High Street
 London E1, England

which is the cheapest and best source of books, both English and American, including long out of print books on libertarian experiments.

They also print ANARCHY, which primarily does stuff on actual living, or recently dead, experiments in people-powered things like schools, coops, rent strikes, etc. Not much old fashioned anarchist politicizing. I commend it highly, and urge those with some bread to buy all available back copies. They also print FREEDOM, which I don't recommend since it tends to collect all the anarchist philosophizing and retching.

COMING DOWN FROM BAD TRIPPERS

Here's a thingie on how to get off a bummer, and a good way to bring down after long booze trips, etc.

NIACIN INTERVENTIONS IN DRUG (ESPECIALLY LSD) ALCOHOLIC CRISES

THE HOD TEST can be used as a rough measure of the severity of the crisis: C. F. Fleet Company, Incorporated, Post Office Box 1100, Lynchburg, Virginia 24505 (also an inexpensive source

for vitamins not requiring an Rx).

Emergency in-tervention:

By physician—intravenous or intramuscular injection of B Complex

3000 mg (3 grams)	Niacin (vitamin B-3)
1000 mg (1 gram)	Ascorbic Acid (vitamin C)
250 mg	Thiamine (B-1)
100 mg	Pyridoxine (B-6)
100 mg	Cobalamin (B-12)
3 capsules	Multivitamines with Minerals

Routine for rehabilitation for long term problem

1000 mg	Niacin
500 mg	Ascorbic Acid
100 mg	Thiamine
50 mg	Pyridoxine
50 mg	Cobalamin
1 cap	Multivit with Minerals

four times a day

small cap of A & E once a day

Niacin will produce a flush, sometimes itching and bright red skin about 5-15 minutes after oral intake. This reaction can be used to enhance the placebo effect by telling the subject that he will become quite warm, flushed, and that this is flushing out the poisons; he can be told to lie down and let the mixture work, cover up good, etc.

The flush will stop after some three to four days. Niacin should be increased until a flush is produced and the flush producing level used as the regular amount. We have used up to six grams four times a day on some severely distressed schizophrenics.

None of these vitamins require a prescription; however, routine physician evaluation is essential, blood chemistries should be run. False positive SGOT'S (liver function) are seen in 1 of 20 cases. They always return to normal within two days of removal of Niacin; the literature shows no confirmation of damage through biopsy examination despite thousands of cases now reported. The main purpose for the other vitamins is because of the synergistic effect of B vitamins. Large doses of B may cause deficiencies in other B's.

Coffee, large amounts of liquid, etc., flush vitamin B. Addicts to coffee, etc., should have larger amounts of vitamin B if they cannot be controlled.

See: Niacin Therapy in Psychiatry, Hoffer, A. Charles Thomas, Springfield, Illinois.

It may be of interest to other catalogiers that about a quarter of a pound per 100 pounds of body weight of rose hips will trip you out pleasantly, healthfully and relatively inexpensively—not to mention legally. The rose hips can be eaten like peanuts and taste yummy. Nearly all organic food places sell them and Walnut Acres and others sell them in several pound boxes.

Best,

George von Hilseheimer
 Orange City, Florida

Eek, almost forgot the best thing of all. A free abortion referral service, that is EXCELLENT, is Area Code 612-545-8085 or 1113 (Minn, Minn).

More on Wind Generators

The issue I have is Spring 1969. On page 36 of that issue you have an advertisement for a wind generator and asked information concerning that machine. I was a technical assistant in the field of Village Crafts and construction for the U.N. in the late 50's. My employing agency was the International Labour Office in Geneva and I was working with the Fundamental Education programs in India and Thailand. We tried several wind generators and found the most reliable to be one we purchased from Australia. It had a 36 amp out-put with 4 knots of wind. The engine, windmill and 50' tower cost at that time (1958) around \$600.00 It had the advantage of having the same company producing all types of appliances that were for use with that wind machine. I regret I no longer recall the name of the company that furnished the machine. However I am sure that an inquiry to the Australian Trade Bureau or the I. L. O. would produce the manufacturer for you.

I am also looking for a place where horse drawn wagons are still made in the U.S. James Brenner of Kilkenny, Ireland makes a fine wheels and wagons but shipping cost are prohibitive.

Thanks again for your fine Catalogue.

Pat R. Matlock
 Captain Cook, Hawaii

Subsequent to our reply of 2nd February, 1970 re wind generators, we were advised of two Australian firms who manufacture such an item:—

Dunlite Electrical Co. Pty. Ltd.,
 21 Frome Street,
 Adelaide, South Australia 5000

Quirk's Victory Light Co.,
 33 Fairweather Street,
 Bellevue Hill, N.S.W. 2023

We suggest you contact both to determine if the wind generators are available for export to the U.S.A.

Yours very truly,

E. J. Gaffey
 Australian Government Trade
 Commissioner

Who's got the Straight Skinny?

Something I would like to see in a Supplement is information on the Merchant Marine. Not necessarily the U. S. Merchants, I hear there's an awful lot of hassle with unions [God Bless 'Em], but the merchants in general: contracts, conditions, rules & regulations, Documentation Requirements. Everything I get seems to be a lot of hearsay. How about some straight skinny, mate?

P. G.

Complaint

Your catalogue has good substance - but is functionally illiterate & illegible at your layout and production is amateurish and pretentious - high school year book quality - can you really try harder? Whats the silly circle symbol crudding up your barely adequate illustrations for? Some ones ego? Fire your art director and you'll improve immeasurably! Randall Smith

Billy Kieth Crum says



Dear sir

I got 2 of your Fall Catalogue, I'll be sendin one back, with a note explainin it. SEND NO REFUND

Im not sure your book is worth \$4, but I'm not sure it aint I'd like to recommend for "Nomadics" I reckon,

A. R. Harding Publishers
 2878 E. Main Street
 Columbus, Ohio 43204

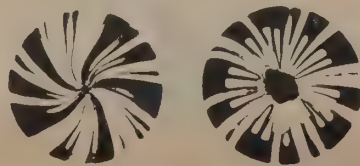
They publish, fur fish game, a very good mag, and paperback books you can't get noplacelse. With instructions on building log cabins, snowshows, bee huntin, steel trap sets ect. Im commencin to look at hippies as fellow woodsmen with a mite different view on life. I figger you folks are at least hippie oriented, and I was impressed with your view on Bean, Herters, and Bauer. We are fairly close. Though, Colin Fletcher can talk all he wants, a man in the woods with no gun is wastin his time.

Im a mite intersted in commune livin. I read some Robert Rimmer (got your adress from one of his lists). I am opposed to commune livin, and think of myself as a rugged individualist. Still, I like sex, outdoor livin and usefull hard work, home made food and pretty much in that order. I'd like to live in a commune, please recommend one, to see what it's like. Long as they pretty much live me alone, don't mind my huntin, fishin, chewin tobacco and hard liker, and dont come in to inspect my gear or gripe about my personal appearence, we couldn't do worse then tolerate one another. Im as good a woodsman as any other city slicker raised by a hillbilly dad, and spent 3 years in the army including 8 to 10 months straight "under canvas."

Once again, much oblige for your catalogue, and maybe I'll be hearin from you.

Yours

Billy Kieth Crum
 Ft. Riley, Ks.



Letter from New Mexico

Dear Friends,

As the time to till the soil comes near, I think back over our time in New Mexico. Not yet a year but enough time to learn much about this beautiful land that we dreamed of so long. There is much we have learned—not in a mind blow out but rather in the joy and perfection of creative living. There is a great magnificence to New Mexico, the spacial fields the surrounding mountains and mesas, and the cultural individuality of the people. To live in this grand setting utilizing the raw materials, being close with local people and make a life time home.

Your past doesn't matter when you come but your skills do. How long you went to school is unimportant when drinking wine with the Indians and Mexicans or when carrying water from a couple of miles away because the stream froze and the water went underground. The tools you brought are probably the second most important thing. That and your ability to utilize whatever is around.

When my husband and I left the east, we had each made many scenes been many places but the peace that we were seeking always came in a natural setting. New Mexico told me that there was great wisdom to be found here. I felt this when I was last here six years ago. So we saved, without selling our souls, to get a vehicle to get us across country. We wanted to make my five year old daughter feel comfortable. So my husband built a house on the back of an old flatbed. This tin roof chicken house was able to house four people, two dogs and a cat. Seems impossible but he took out the back window and made a hole to the house so the animals and small people could move around comfortably without stopping. A fifteen year old boy from the school we taught at came with us.

Like most of our people we didn't have much money, so we wanted to take the essentials—warm clothes, tools, plenty of blankets, cooking utensils and some craft materials. We had lived in a tipi for a year and I forgot how small it closed up to. Three ft wide by 2 ft high lining and floor covering included. Our tipi was an eighteen footer. We didn't take the poles because wood would be accessible. A supply of food was necessary so we never would have to lean on friends. There are so many foods that will keep and a larder of grains, dried fruits and such could keep us going for a while.

Our route depended on where our friends lived. Stops along the way were necessary because of the physical defects of the truck. The truck became known as Blood Sweat and Tears and that is what it needed to keep it going and of course lots of oil. Actually the truck was a joke but with perseverance and cursing we somehow made it to New Mexico.

From my time on the peyote road I had friends in Santa Fe. We also knew people who ran a Summerhill school, the Santa Fe Community School. Most of the good people had headed for the hills. It was summer and the height of the hippy season. The people we talked to were so uptight about anyone new. Later I understood their situation but then information was all I was seeking. Not a place to crash or a meal just where certain communes and people were. The only information I got was where to stay. Hyde Park was a perfect place. \$1.00 a day wasn't much then. The only difficulty was going down the mountain with little or no brakes. We were looking for a commune some where near Colorado named Libra that's only requirements were that you would support yourself, not build in the sight of anyone else, and you were together enough not to bring your problem to others. The scanty information we got was that it was near Chama. Of course all we need do was ask around. That didn't seem like much to go on but I didn't want to stay in Santa Fe any longer. It seemed like the place to come in the dead of winter with some hand made goods to sell. The only warmth we felt was from the shop-keeper at the Old Santa Fe Trail.

So up the trail we continued. Of course we never found Libra. But we saw another part of New Mexico. I was ready to settle among the Mexicans and sell leather goods and pottery to wealthy Texans that came hunting in northern New Mexico.

We decided to try the Taos area and see some friends at the Hog Farm before we settled. I was amazed at the help we got. Taos too was flooded with wandering people searching. Lorien Enterprizes had set up an information center where you could find out about communes, can food and a lot of other helpful things. Some how we landed at a commune called Five Star. I liked the feeling of the people camping around. We didn't want to get too involved so we stayed on the side lines helping in the garden. The garden these people planted was plentiful. They did a great job and could have easily lived on what they produced. Even get off food stamps but there were so many people tripping by. I cooked at the big house a couple of times and there were between sixty and eighty people.

It was a favorite spot for Mexicans, Indians, Hippies and straights because of the Ponce de Leon Hot Springs. It was easy to just sit in the hot springs drinking with the

people gawking at the naked chicks. But that wasn't what we were looking for. There were a few kids around that my daughter could play with. Most of the trippers were young and free and not too interested in working in the garden but interested in eating. At Five Star about eight or nine people did most of the work.

As summer drew to an end we decided to put the tipi up the canyon. A friend had checked with a realtor to see if there was land available to live on free. My husband was into building a rabbit hutch for some 4H rabbits that were laid on us. I was preparing for winter by helping canning, pickling, pickling and drying foods with the Five Star Commune. A pressure cooker was essential for at this altitude vegetables had to cook for eight hours. Getting water and cutting wood was an everyday job but it was doubled when canning. That's when the Information Center came in handy again.

We had picked peaches off the ground at an orchard. Many commercial orchards will let you pick fruit off the ground. That and the wild plums, cherries and with the food Five Star had grown, canning was a full time project. The Information Center had several stoves and info about canning. They had a large kitchen. When I was there I found out about the other activities of Lorien Enterprizes.

They put out a paper called *The Fountain of Light*. Helped run a garage called M and M where you could work on your car free using their tools. Ran the General Store where you could buy and sell at reasonable prices. Most important they backed the Free Clinic that later saved many lives.

Next year they were planning to open a school. That is when I decided to apply for a New Mexican teaching certificate. No matter where we were I would probably be teaching my daughter and other kids. I talked to a hippy social worker that dealt with the communes. He said a school of any kind was desperately needed. The schools had enough trouble assimilating the Mexicans and Indians and they didn't want the problem of long hairs. They were keeping the long haired boy we brought with us out of school. So we talked about setting up a small school at Five Star. I got together with interested people and set up a schedule of what people wanted and could teach. Then we met with the kids and found out what they wanted. The kids came from the Taos area. There were only ten to begin with.

Before we got started we were hit with a plague of amoebic dysentery. It was the fly season and the mosquito season had just ended. A couple thousand people had tripped through the hot springs and the pool had never been cleaned. So my husband and a friend that lived with us started hauling water from town. Water was even more precious. The hot springs had amoebic dysentery in the algae in the pool. Many people were coming down with dysentery. The Free Clinic was filled. I was pregnant and they insisted I go into the hospital because I too got the bug. The kids and the teachers of this new found school all came down with dysentery.

Going to the hospital was foolish—they did nothing more than I did at our tipi. My husband had just built a cook shack out of totally scrap lumber. Now sanitation had to be thought of more. So an out house was begun. It was Sept. and we were getting ready for the first snows. There was always some question about whose land we were on. Land in New Mexico has been divided up from Spanish land grants and passed down to each son in long narrow strips. Of course to listen to our Indian friend, they say that all the land around Taos belongs to the Pueblo Indians. But if you talk to a Jicaria Apache they say that land is theirs for they hunted and camped in the area.

The largest family who owned land near our tipi sight was the _____ family. One day an Uncle of the clan from California, a cousin from up north and one of our neighbor friends happened by our tipi checking cattle. They wanted to know what our plans were. How we made our money and what we were going to contribute to the economy. When we spoke of being craftsmen they said they had their own craftsmen who needed to make a living off the tourists. The conversation left a stale air in the tipi. Somehow I knew we weren't settled yet. Even though we rarely went into Taos, I felt we were too close for comfort. So we started asking about land further away.

I won't go into the sad story of the break up of a community. Somehow we were visited everynight by several people of the commune. The final push was when a group of well dressed Chicanos came and told us this was their land. We'd better get off or they would bring the sheriff. Our friend checked with the realtor and they said they could stay. But we did not want to.

We had heard about some land about a hundred miles away. It had been bought by a New York doctor and turned over to God. Our truck had broken down a long time ago and been traded for another broken down small car. So our next project was to get a truck to move us.

It was the full moon that speeded us up but still it took us four days to find an ex-Hells Angel with a classic 1937 flatbed. While some of us looked for our Angel others went to visit God's land. They came back with beautiful stories of running fresh streams, oak groves, ponderosa pine forest and mica speckled rocks. What a picture we made when we started off with all our possessions. Our family had changed and grown to five—a lot of rabbits and dogs. This time we took the tipi poles.

It was great leaving the sage and sand behind. Going over large mountains which opened up to lush valleys with cattle and cowboys along the road. Our destination was in a valley surrounded by mountains. There were five people already here. They had been living off the apple and plum orchard and ate heartily when we arrived.

We still didn't want to be part of a community but being organized makes you a nucleus for people to come around. We set up our tipi by the stream and further away dug an out house. We agreed not to ruin the land in any way. Not to cut any living trees. Not to build in the sight of one another and try to keep cars off the land. There of course could be no rules for people who didn't believe in rules. Since new people would always be coming everything was subject to change.

First the local people were very interested in this new population. For a town of about 100 that are all related, we were an entertainment. Cars came up at all hours, sober, drunk, before church and after church. Actually the people, whatever condition, were very nice and concerned about how we were going to make it. When they found out that we were not different from them, the traffic slowed down and we made friends with many families. We learned much from our neighbors.

The first snow was a shocking reality to many. It weeded out many crashers so we could move around a little easier. People that didn't even have a warm coat or a good pair of shoes hit the road for Taos. We realized that our supply of wood was scanty and we had best get to work. We were cooking out doors, as I usually did when we lived in the tipi. It was neater and there were now seven people sleeping in the tipi. One of the local families came with their twelve kids the first snow bringing beans and biscuits. They told us this was an early snow and were worried if we were warm enough. Thanks to all the blankets we were comfortable.

The men started to increase our wood pile and I got squaw wood. We had two axes but a well meaning tripper who didn't know what he was doing broke our ax handle. It would have been good if we had another hickory handle for there were no cars on the land. A friend of my husband's had learned the skill of making ax handles. He found a piece of oak and finished the job with a draw knife, a wood rasp and a D-saw.

The two shovels we brought were essential because the guys started to dig a house below ground. They had dug six feet in some places. Then they were told that the water level rises ten feet and we would be flooded come spring. So that project was abandoned.

A well meaning person in the town told them they could cut timber or use tree tops that couldn't be used for logging. So a week was spent in dragging down logging tops, cutting the small branches off and cutting them to the correct size for our log cabin. We then found out that even though many son, daughters, aunts, uncles, cousins and nephews own one piece of land—it is the oldest member of the family that has to give permission before anything can be taken off said land. So logs had to be found some where else.

In between all the projects of trying to build, we still needed to eat. Up until then we had not used food stamps. Somehow one of the chicks went down and gave everyone names for food stamps. Our winter supply had been depleted by the amount of people we were feeding. All time was needed for trying to build so food stamps were welcome. But we hoped we would be off them come planting season.

Every time new people came to the land it showed. So luckily only the prepared could stay. The tipi was comfortable if we had enough smokeless wood—dry cedar in combination with split dry oak and plenty of kindling. The next cozy temporary shelter were army wall tents.

The guys heard of a national forest where one could get logs that were down but couldn't cut green trees. The fiasco of getting 42 logs was unbelievable. The first part only took three days. After the second part of the trip, the local bar owner told us that we could take log tops that he had paid for and did not need. The cabin materials were coming together. The guys had gotten eleven vigas from helping tear down an old garage. Also most important were three sets of eight paned windows.

When pulling all the materials together they totaled to 16 logs—18 feet long and 20 logs—11 feet long. We bought three truck loads of half rounds at \$4.00 a truck load. The first project in putting this large Lincoln log set together was to debark the logs with an ax. The dimensions of the cabin were 21 ft. long by 10 ft. wide. The vigas were to be used for the back wall with a stone fireplace as the center. The 18 footers were cut in half for the front leaving 3 ft. for the door. The notches were made with an ax for the lower logs and a chisel for the upper logs. After all the logs were laid, the four main roof vigas were placed. The roof was put on with tar paper and half rounds for latias. Half rounds were used for the final layers of roofing. The sloping sides were also finished with half rounds.

(continued on page 49)

Death, Old Friend

A Funeral

The big disadvantage in trying to deal with undertakers is that they've got more experience with dead people than you have. A busy funeral director will supervise more funerals in a month than most of us even go to in a lifetime. And merely going to a funeral is a very different order of business from being in charge of one.

In my 32 years I've been involved in an intimate way with funerals of six relatives, my father, a brother, an uncle I was very close to, and three grandparents, two of them in the last year. But it was only my grandmother's funeral last January that I had full responsibility for. And the thing that amazed me was how little all my "experience" with funerals had prepared me for what I was now required to do.

It wasn't as if her death took me by surprise. She was hospitalized last July, a few months after her husband died. By Thanksgiving she couldn't get out of bed. By Christmas pneumonia had complicated her already hopeless condition. She was almost 80. It was time for her to die. And yet, when it happened, I was no more prepared in any practical way than if she'd been suddenly killed in a car wreck. The price of that unpreparedness was winding up virtually powerless when, in my capacity as my grandmother's closest surviving relative, it came time to act as the "responsible" member of the family.

Cremation wasn't really one of my options. We'd been through a whole cremation thing last spring when my grandfather died, and the effects of it still loomed unpleasantly in the minds of the family members. My grandfather had wanted to be cremated. In fact, a few years before his death, he tried to involve me in a kind of conspiracy to see that it was done, knowing that his wife finally wouldn't be able to. As it turned out, he was right. She told the undertaker to have it done. But the decision upset her so much, and upset other relatives, that at the last minute, after a night of wild and grotesque dreams on top of her already intense grief, she changed her mind.

Do-It-Yourself Burial for \$50

Human bodies are an organic part of The WHOLE EARTH and at death must return to nourish the ongoing stream of life. Most of the billion dollars annually which Americans pay to the undertaking industry to dispose of corpses is sheer waste, both of money and of ever decreasing living space for posterity.

Isn't there some way," I was asked by a widow," that two or three of us could dispose legally of the corpse for a few dollars? My husband's death left us badly in debt but I had to go further in debt to pay a funeral director because I didn't know what else I could do."

Contingency Planning is the essence of a Do-It-Yourself Funeral. What we need is not so much to escape the clutches of a profit-motivated business but to remove our own vulnerability by preparing to do ourselves what needs to be done. Actually in usual cases it is quite easy. Nothing very "professional" is required that any poor man or woman cannot do themselves.

If you are going to act "in place of" a funeral director you have to get prepared well ahead and take charge immediately. There is not time to learn the ropes after death occurs. One cannot just copy the writer's experience, but I can give you a close idea of what to expect. Then decide if you want to take the trouble or just pay a professional to do the work for you.

The when and where and who of death is not always very predictable. It is best to have a group plan for one's family, church, union or commune. A burial committee of 3 persons, any one of whom can take charge, can be specified in one's last instructions, just so no one is paid.

Take this example (in California):

The grandfather entered keenly into the project to set his whole family an example. When he died here is how we carried out his wishes:

- 1) We got out his instructions which were left handy to get at. The other grown members of the family had each completed their own set of instructions—or specified that the same ones be followed. Three of us, a son, grandson and uncle were named, any one of whom were authorized to act as his "funeral director."
- 2) We went immediately to our County Health Department office of Vital Statistics and obtained a Certificate of Death form, showing our authorization to do so. We had already in advance obtained a copy of the form to familiarize ourselves with the information required. We filled in the details and
- 3) Took it to the medical doctor who verified the facts of death to complete the technical questions. In cases requiring a coroner's action the latter would do that.
- 4) Then the "person acting in place of" a funeral director completed the Death Certificate and returned it to the Registrar of Vital Statistics to become a part of the state's permanent public records.

We applied for a certified copy of that Death Certificate and paid the \$2 fee. For another \$1 we obtained a "Permit for Disposition of Human Remains." These are needed to satisfy a hospital, possible police inquiry and to assure the receiver that he is authorized to cremate.

Then, a little less than ten months later, she was dead too, lying in the same vault in the same funeral home her husband had occupied. And I was in charge of seeing to her burial.

But of course I wasn't really in charge. What was in charge was a set of attitudes whose origins stretch farther back in time than I can account for. It was a collective sense in the minds of all the people who participated in the funeral, as thick and as palpable as politics, and as difficult to wade through. Ostensibly, I could make any decision I wanted to. But I was also responsible to a lot of people very different from me, and that responsibility rang through my head like a dark mandate out of history. Bury her decently!

Being conscious of motives my relatives were unconscious of was an overpowering feeling. The presence of death was touching levels of all our psyches in dark and mysterious ways. Something older than the mountains around us asked for our attention, and got it. We recognized it subtly, but with vast respect. With rituals, with totems, with words and gestures we paid homage to this ancient force left over among us from timeless old time ago. For all my "sophistication" and modernity, I was no more capable of tampering with such a force than I was of controlling the wind. Mean old death, sweet eternal life in Heaven with Jesus. Those were the terms. The body was the sacred object, the funeral a mystic ceremony to appease the dark unknown we felt surrounded by. Every time I'd have to make a decision, The Force would claim my tongue and say things I'd been determined not to say, until, by the time it was over, the funeral I'd arranged was virtually identical to the one my grandmother had arranged for my grandfather ten months earlier. That seems very far out to me. My grandmother was a child of the 19th century. In many ways I claim to be a man of the 21st. And yet, in the presence of death, among a clan of people surrounded by death, there was hardly any difference in our attitudes and behavior. I'm not sure what that means. But as I board Spaceship Earth for our cruise to the next century, it gives me pause. The vehicle is getting pretty fancy. But I wonder about the deeper mind of the members of the crew.

6) We went home and got out the six foot box which we had made long before from odd bits of plywood for \$5. The cheapest wooden casket sold for \$85 but why waste it? Some places do not even require a box for cremation.

7) After checking the crematory about delivery we took our box of remains there by pickup truck and handed over a check for \$40, the local fee which elsewhere varies. We presented the two certificates from the County Health office and signed the authorization to cremate.

The crux of disposal is the requirement on all these forms that one must specify a legal (i.e. cemetery or columbarium) place of final interment by name and address. In practice this means another \$150 or more for a plot or niche. Even strewing ashes at sea is made ridiculously complicated and costly—to discourage it. The lobby of the industry in this state has so far defeated all attempts at funeral reform which would permit relatives to keep the ashes at home or to strew them in the family garden or at a public (outside city limits) park or seashore. You may find that where you live it is perfectly legal to do this.

8) However, in this case Grandpa ordered his "funeral directors" verbally to finish his wishes as follows:

- a) fill in the name of a cemetery back in his home town to satisfy the statistical requirement.
- b) take personal custody of the ashes for delivery in a little box we made.
- c) then later scatter the ashes on the Sierra as he had privately ordered.

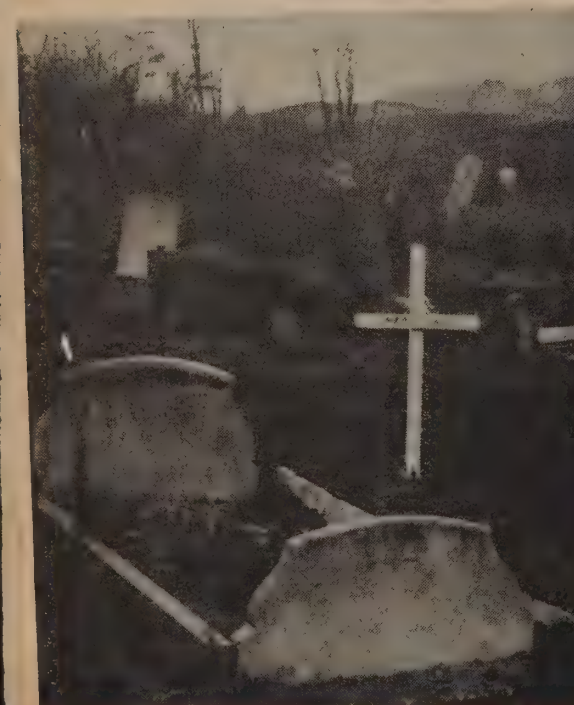
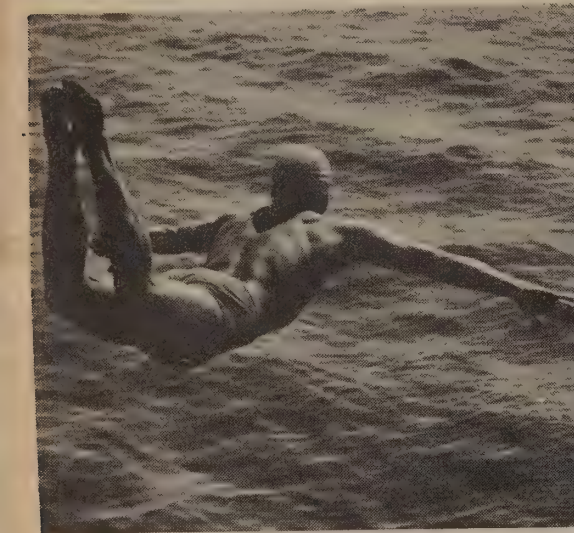
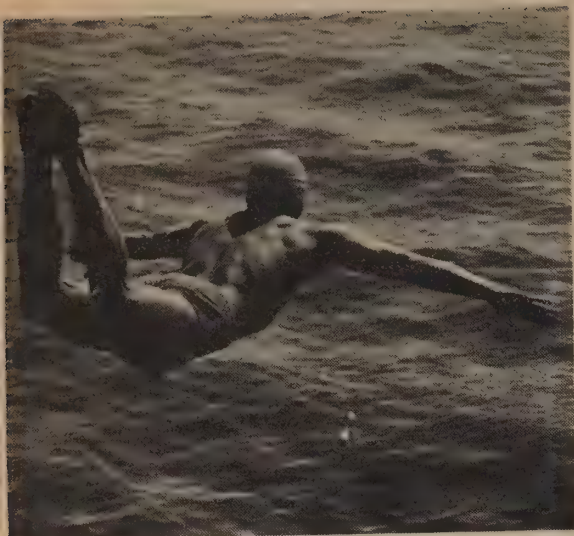
Most people would rather "pay the piper," even though they feel that final regulation is ridiculous and exploitative—rather than be forced to subterfuge. However, these last wishes were complied with discreetly and privately and no questions have arisen in this or other similar cases.

To complete this example I must report that two Sundays later friends and relatives gathered for a jolly memorial feast, to which all contributed, in honor of our departed. The full amount payable in "death benefits," \$1000, the deceased left in a scholarship savings account for a couple of his grandchildren.

For your further study get through WHOLE EARTH CATALOG Ernest Morgan's "Manual of Simple Burial," an excellent guide to lots of other business that needs attending to at the time of a death. Also join with others who are already organized to handle death simply and with dignity. The Continental Association of Funeral and Memorial Societies at 59 East Van Buren Street, Chicago, Illinois 60605 can direct you to one of their non-profit member societies near you, to which millions of families and individuals belong. Their voluntary elected officers can help you, as they did us, to make your own family death contingency plans.

The most popular procedure up to now seems to be an arrangement with local funeral directors who co-operate with a Memorial Society in providing minimal disposal service \$150 and up plus another \$150 or so for a cemetery plot or columbarium niche. However, in the example given total burial costs were \$48.

Anton Nelson



Park of The Ever Living

Select a tract of wooded and/or meadow land, which contains nothing but earth and vegetation, no junk, no waste that is incapable of being reduced to clean earth again. Here will grow trees, grass, shrubs and flowers. The tract will be laced with foot trails.

Here will be received the ashes, after cremation elsewhere, of those for whom burial is desired.

It will be only for those who want perpetual honor given only to their souls and/or the lives they have lived and want only temporary honor given to their bodies—the honor, in the words of Walt Whitman, of being “returned to the eternal uses of the earth.” Those who believe in personal immortality as I do, should prove their faith by scorning to preserve a body for which the soul no longer has any use.

The custodian of the Park of the Ever Living will receive only ashes contained in a simple light wooden box, designed not to be preserved, but to disintegrate and become wholly a useful part of the earth.

Burial will be under trees, under flower beds, under grass. The spot of any burial will not be marked in any way—no monuments, no headstones, no labels. . . . This is the kind of burial that will be desired by men of great mind and heart, free of superstition. . . . The ashes of such men will be sent to the Park of the Ever Living from all over the world.

excerpt from a statement by Edward J. Meeman,
Press-Scimitar, Memphis, Tennessee. Suggested by
Richard Raymond.

Anyone Want to Die Here?

I wrote Richard Alpert once about a “Center for Dying” and he expressed continuing interest. The problems were legal and economic, said he. I suppose that’s still true but I’m happy to see the Catalogue planning a section on it. Laws can be changed and as for money, rich people have to die too and should be as concerned as anyone to die well, and so be willing to help on this.

I’ve an acre of land nearby. No trees on it but a beautiful view over a valley & mountains and clear to the ocean. What could we do with it? Put up a Center? It’s zoned residential, one-family with guest house, only one kitchen—very posh area but it’s *not* zoned against being born and dying. Why not try something with it? Meanwhile anyone who wants to go up there and die among the lupine with a superb view is welcome to do so, or anyone who wants to bury a friend—well I certainly wouldn’t interfere or complain. I suppose a problem could arise in that Mafia and hoods would use such an area and bring in very bad vibrations, as they always do. I wouldn’t like that.

Probably you’ve seen this article in the L.A. Times but I’m enclosing it anyhow. In Siskayou County, Calif. dying or at least burial seems a bit less up-tight. I can’t vouch for its accuracy of course but it sounds interesting & possible.

I’ll gladly answer any letters sent me c/o Whole Earth Catalog.

Ria

On Death and Dying

On Death and Dying establishes a psychological fact that most people close to a dying person already know, even if they can’t admit it: One tends to turn away. Even from husbands, even from wives, even from one’s own children. Dying people are casualties of life. Their dying, especially if it is a long, drawn-out affair, is a reminder of how vulnerable we all are, and that’s something most people want to forget.

It’s in our process of trying to forget that the dying person himself is often forgotten. There he is, lying there, waiting to be recognized. Doctors, nurses, friends and relatives come to “see” him every day. But what he is desperate for is recognition, and recognition is what we seem so utterly unable to give.

On Death and Dying is a powerful book, because it forces the reader into the point of view of someone dying. Suddenly you’re on the other side of that glass between the living and the dying, and it’s not comfortable. But, as Elisabeth Kübler-Ross points out, the point is not always to “comfort” the healthy. That tendency is a major cause of the intense psychic suffering dying people must endure, in addition to the physical failures that are killing them. This book speaks for the dying in a way they are unable to speak for themselves. It’s disturbing, but then so is all education. I’d say this book is indispensable for all people who are living in the presence of someone else’s gradual death.

I remember as a child the death of a farmer. He fell from a tree and was not expected to live. He asked simply to die at home, a wish that was granted without questioning. He called his daughters into the bedroom and spoke with each one of them alone for a few minutes. He arranged his affairs quietly, though he was in great pain, and distributed his belongings and his land, none of which was to be split until his wife should follow him in death. He also asked each of his children to share in the work, duties, and tasks that he had carried on until the time of the accident. He asked his friends to visit him once more, to bid good-bye to them. Although I was a small child at the time, he did not exclude me or my siblings. We were allowed to share in the preparations of the family just as we were permitted to grieve with them until he died. When he did die, he was left at home, in his own beloved home which he had built, and among his friends and neighbors who went to take a last look at him where he lay in the midst of flowers in the place he had lived in and loved so much.

He was quite aware that his days were numbered, and his greatest wish was to be moved into different positions (he was paralyzed to his neck). He begged the nurse never to put the siderails up as it reminded him of being in a casket. The nurse, who was very hostile to this patient, agreed that she would leave them down at all times. This private duty nurse was very angry when she was disturbed in her reading, and she knew that he would keep quiet as long as she fulfilled this wish.

But I, it isn’t dying alone, it’s the torture that pain can give you, like you just want to tear your hair out. You don’t care if you don’t bathe for days because it’s just so much effort, like you’re becoming less a human being.

As Roshi Taji, a contemporary Zen master, approached death, his senior disciples assembled at his bedside. One of them, remembering the roshi was fond of a certain kind of cake, had spent half a day searching the pastry shops of Tokyo for this confection, which he now presented to Roshi Taji. With a wan smile the dying roshi accepted a piece of the cake and slowly began munching it. As the roshi grew weaker, his disciples leaned close and inquired whether he had any final words for them. “Yes,” the roshi replied. The disciples eagerly exclaimed, “Please tell us!”

“My, but this cake is delicious!” and with that he died.

Told to Philip Kapleau
Reprinted from *Zen Bow*

The Hospital Death

The dehumanized atmosphere of the average hospital death has become a tragic sign of our times. The lonely bed of the dying more often than not contains a “sedated, comatose, be-tubed object, subconscious if not sub-human,” for the cool efficiency of the medical technocracy has created a laboratory-like environment where human emotions seem almost unwelcome. Undeniably medical practice inherently expresses deep compassion, but that compassion seems to have gone increasingly astray as the art and religion of death have become drowned in the science of prolonging life at any cost. “To die in a hospital, probably while under the mind-numbing influence of some opiate, or else under the stimulation of some drug injected into the body to enable the dying to cling to life as long as possible,” says Evans-Wentz in his Preface to *THE TIBETAN BOOK OF THE DEAD*, “cannot but be productive of an undesirable death, as undesirable as that of a shell-shocked soldier on a battlefield. Even as the normal result of the birth-process may be aborted by malpractices, so similarly may the normal result of the death-process be aborted.”

Reprinted from *Zen Bow*, vol. II, no. 5; published by The Zen Meditation Center of Rochester, 7 Arnold Park, Rochester, N. Y. 14607. Philip Kapleau, Resident Teacher.

Everybody expected her to die soon, but day after day she remained in an unchanged condition. Her daughter was torn between sending her to a nursing home or keeping her in the hospital, where she apparently wanted to stay. Her son-in-law was angry at her for having used up their life savings and had innumerable arguments with his wife, who felt too guilty to take her out of the hospital. When I visited the old woman she looked frightened and weary. I asked her simply what she was so afraid of. She looked at me and finally expressed what she had been unable to communicate before, because she herself realized how unrealistic her fears were. She was afraid of “being eaten up alive by the worms.” While I was catching my breath and tried to understand the real meaning of this statement, her daughter blurted out, “If that’s what’s keeping you from dying, we can burn you,” by which she naturally meant that a cremation would prevent her from having any contact with earthworms. All her suppressed anger was in this statement.

On Death and Dying
Elisabeth Kübler-Ross, M.D.
1969, 260 pp.

\$6.95 postpaid

from:
Macmillan Co.
Front and Brown Streets
Riverside, Burlington County
New Jersey 08075

or WHOLE EARTH CATALOG

Tibetan Burial

The four Northern Buddhist methods of disposing of a corpse correspond to those mentioned in various of the sacred books of the Hindus: a human body is said to consist of four elements,—earth, water, air, and fire,—and it should be returned to these elements as quickly as possible. Cremation is considered the best method to adopt. Earth-burial, as among Christians also, is the returning of the body to the element Earth; water-burial is the returning of the body to the element Water, air-burial, to the element Air—the birds which devour the corpse being the denizens of the air; and fire-burial, or cremation, the returning of the body to the element Fire.

When air-burial is adopted in Tibet, even the bones of the corpse, after the birds have stripped them of flesh, are disposed of by being hammered to bits in small cavities in the rocks of the funeral hill, then mixed with flour and formed into a dough and given to the birds to devour. The men who perform this part of the burial belong to a special caste, and, being regarded as unclean, are ordinarily shunned by other Tibetans. The Tibetan air-burial is thus more thorough than that of the Parsees, who allow the bones of their dead to remain in the air and slowly decompose.

In a Tibetan funeral of the ordinary sort, neither a coffin nor any corpse-receptacle is used. The corpse after being laid upon its back on a sheet or piece of cloth spread over a framework, commonly made of a light material like wicker affixed to two poles, is covered with a pure white cloth. Two men, inserting their heads between the projecting ends of the two poles, act as pallbearers. In Sikkim, however, the corpse is carried thus sitting, in the embryonic posture described above.

The Tibetan Book of The Dead

W. Y. Evans-Wentz, editor
1960; 249 pp.

\$1.95 postpaid

from:
Oxford University Press
200 Madison Avenue
New York, N. Y. 10016

Funeral and Memorial Societies

According to *A Manual of Simple Burial*, (p. 80, fall, 1969, Catalog), the best alternative to expensive, hastily-improvised funerals is membership in a memorial society. The Continental Association of Funeral and Memorial Societies, Inc. (59 East Van Buren Street, Chicago, Illinois 60605) publishes this list of member groups:

MEMBER SOCIETIES AS OF NOVEMBER, 1969

(Write the Association if more recent information is needed)

CANADA

- ALBERTA
EDMONTON, Memorial Society of Edmonton, P.O. Box 471
- MANITOBA
WINNIPEG 3, Funeral Planning Assn. of Manitoba, 790 Banning
- ONTARIO
LONDON, Memorial Society of London
c/o Mrs. Clara Burton, 243 Epworth Avenue
- TORONTO Memorial Society
c/o Mrs. A. J. Elder, 14 Sinton Court, Downsview
- QUEBEC
MONTREAL 25, Memorial Assn. of Montreal, 3415 Simpson St.

UNITED STATES

- ARIZONA
PHOENIX, Valley Memorial Soc., 1510 W. Garfield St. 85007
TUCSON, Tucson Memorial Society, P.O. Box 4566 85717
- ARKANSAS
FAYETTEVILLE, N.W. Arkansas Memorial Soc., 725 Anna Pl. 72701
- CALIFORNIA
ARCATA, Humboldt Funeral Society, 666 11th Street 95521
CHINA LAKE, Kern Memorial Society, P.O. Box 5674 93556
(Serves Kern, Southern Tulare, Inyo and Northern San Bernardino Counties)
- FRESNO, Valley Memorial Society, P.O. Box 1823 93717
(Serves Fresno, Kings, Madera, and San Benito Counties and northern Tulare County)
- LOS ANGELES, Los Angeles Funeral Society
2224 W. 14th St. (Serves Los Angeles County) 90006
- MIDWAY CITY, Tri-County Memorial-Funeral Soc., Box 114 92655
(Serves Orange, Riverside and San Bernardino Counties)
- MODESTO, Stanislaus Memorial Society, 1025 Ashford Ct. 95350
(Serves Stanislaus, Merced, and Mariposa Counties)
- PALO ALTO, Peninsula Funeral Soc., 168 S. California Ave. 94306
(Serves San Mateo, Santa Clara, Santa Cruz, and Monterey Counties, Serving Bay Area until there is a member society in Berkeley.)
- SACRAMENTO, Sacramento Valley Memorial Society
1412 62nd St. 95819
(Serves Amador, Butte, Calaveras, Colusa, Glenn, Nevada, El Dorado, Placer, Sacramento, San Joaquin, Shasta, Solano, Sutter, Tehama, Trinity, Yolo, and Yuba Counties)
- SAN DIEGO, San Diego Memorial Society,
c/o Miss Florence E. Parker, 3656 Eugene Place 92116
(Serves San Diego County only)
- SAN LUIS OBISPO, Central Coast Memorial Society
P.O. Box 679 (Serves San Luis Obispo County) 93401
- SANTA BARBARA, Channel Cities Memorial Soc. Box 424 93102
(Serves Santa Barbara and Ventura Counties)
- COLORADO
DENVER, Rocky Mountain Mem. Soc. 4101 E. Hampden 80222
- CONNECTICUT
HAMDEN, Greater New Haven Memorial Society
60 Connolly Parkway (New Haven and Hartford areas) 06514
- WESTPORT, Memorial Soc. of Conn., 10 Lyons Plains Rd. 05882
(Serves southwestern Connecticut)
- DELAWARE
NEW CASTLE, Mem. Soc. of Wilmington, 19 Fithian Dr. 19720
- DISTRICT OF COLUMBIA
WASHINGTON, All Souls Funeral and Memorial Society
Sixteenth & Harvard Streets (Serves all faiths) 20009
- FLORIDA
DAYTONA BEACH, Volusia Soc. for Pre-Planned Funerals
322 Silver Beach Avenue 32018
- FT. LAUDERDALE, Everglades Memorial Society
2190 N.E. 51 Court, Apt. 306 33308
- FT. MYERS, Memorial Soc. of S.W. Florida, P. O. Box 1953 33902
- ORLANDO, Orange County Memorial Society
c/o Mr. Richard H. Harris, 2215 Edgewater Drive 32804
- ST. PETERSBURG, Suncoast-Tampa Bay Memorial Society
P.O. Box 12231 33733
- TAMPA, Tampa Memorial Society, Inc.
c/o Millard C. Parker, Rt. 5, Box 253, Land-o-Lakes 33539
- W. PALM BEACH, Palm Beach Funeral Soc., 601 Hibiscus 33401
- HAWAII
HONOLULU, Honolulu Memorial Society
2500 Pali Highway (Serves entire state) 96817
- ILLINOIS
CARBONDALE, Carbondale Area Mem. Soc., 301 W. Elm 62901
- CHICAGO, Chicago Memorial Association
59 East Van Buren Street 60605
(Serves most of Illinois and northwest Indiana)
- Champaign County Branch, P.O. Box 162, Urbana 61801
- McLean County Branch, 1613 E. Emerson, Bloomington 61701
- INDIANA
BLOOMINGTON, Bloomington Memorial Society
2120 N. Fee Lane 47403
- FT. WAYNE, Northeastern Indiana Memorial Society, Inc.,
306 W. Rudisill Blvd. 46807
- INDIANAPOLIS, Indianapolis Mem. Soc., 5805 E. 56th St. 46226
- LAFAYETTE, Greater Lafayette Memorial Society
409 Robertson Bldg. 47902
- IOWA
DAVENPORT, Blackhawk Mem. Soc., 3707 Eastern Ave.
(Serves also Rock Island and Moline, Illinois) 52807
- KENTUCKY
LOUISVILLE, Greater Louisville Funeral Society
322 York Street 40203
- MARYLAND
BALTIMORE, Greater Baltimore Memorial Society
23 Valley Road, Owings Mills, Maryland 21117
- FREDERICK, Frederick Memorial Society
c/o Mrs. Helen G. Alexander, Box 413, Route 6 21701
- SILVER SPRING, Maryland Suburban Memorial Society
10309 New Hampshire Avenue 20903
- MASSACHUSETTS
BOSTON, Memorial Soc. of Massachusetts, 874 Beacon St. 02215
(Members throughout New England)
- SPRINGFIELD, Springfield Mem. Soc., 292 Worthington St. 01103
- MICHIGAN
ANN ARBOR, Memorial Advisory and Planning Service
2023 West Stadium Boulevard 48106
- DETROIT, Greater Detroit Memorial Soc., 4605 Cass Ave.
(Serves Oakland and Wayne Counties but accepts branches in other parts of state.) 48201
- MINNESOTA
MINNEAPOLIS, Minnesota Memorial Society
900 Mt. Curve Avenue (Serves entire state) 55403
- MISSOURI
KANSAS CITY, Greater Kansas City Memorial Society
4500 Warwick Blvd. (Serves about 25 mile radius) 64111
- ST. LOUIS, Memorial & Planned Funeral Society
5007 Waterman Ave. 63108
- NEBRASKA
OMAHA, Midland Mem. Soc., 602 City Nat'l. Bank Bldg. 61802
- NEVADA
RENO, Western Nevada Funeral Society
Box 8413, University Station 89507
- NEW HAMPSHIRE
CONCORD, Memorial Society of New Hampshire
274 Pleasant Street (Serves entire state) 03301
- NEW JERSEY
LINCOLN, Mem. Assn. of Monmouth, 1475 W. Front St. 07738
(Serves Monmouth and Ocean Counties)
- MAPLEWOOD, Suburban Memorial Soc., 516 Prospect St. 07040

- MONTCLAIR, Memorial Society of Essex, 67 Church St. 07042
(Serves Essex County)
- MORRISTOWN, Morris Mem. Soc., 812 Normandy Heights Rd., Morristown (Serves Morris County) 07961
- PARAMUS, Central Memorial Society, 156 Forest Ave. 07652
(Serves Bergen, Hudson, Passaic, Sussex, Warren Counties)
- PLAINFIELD, Memorial Soc. of Plainfield, 724 Park Ave. 07060
(Serves Middlesex, Somerset, and Union Counties)
- PRINCETON, Princeton Memorial Assn., P.O. Box 209 08540
(Serves Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, and Salem Counties)
- NEW MEXICO
ALBUQUERQUE, Mem. Assn. of Central N.M., Box 11143 87112
- LOS ALAMOS, Northern New Mexico Mem. & Funeral Soc.
P.O. Box 512 87544
- NORTH CAROLINA
ASHEVILLE, Blue Ridge Pre-Arrangement Soc., Box 2601 28802
(Serves western North Carolina and Hickory)
- CHAPEL HILL, Triangle Mem. & Funeral Soc., Box 1223 27514
(Serves Chapel Hill, Durham and Raleigh)
- OHIO
AKRON, Co-op Funeral Association, 1201 S. Arlington St. 44306
- BOWLING GREEN, Bowling Green Mem. Soc., Box 9 43402
- CINCINNATI, Greater Cincinnati Mem. Soc., 536 Linton 45219
- CLEVELAND, Cleveland Memorial Soc. 21600 Shaker Blvd. 44122
- COLUMBUS, Columbus Mem. Soc., 93 W. Weisheimer Rd. 43214
- DAYTON, Dayton Mem. Soc. (Br. of Columbus), 207 Neal 45405
- YELLOW SPRINGS, Br. of Columbus Mem. Soc., Box 213 45387
- OKLAHOMA
TULSA, Memorial Society of Eastern Okla., 2952 S. Peoria 74114
- OREGON
PORTLAND, Oregon Mem. Assn., 3494 N.W. Raleigh St. 97210
(Serves all of Oregon and part of southern Washington)
- PENNSYLVANIA
BETHLEHEM, Lehigh Valley Memorial Society
701 Lachauweki Avenue, Fountain Hill, Bethlehem 18015
- DOYLESTOWN, Bucks County Memorial Society, Box 1000 18901
- HARRISBURG, Memorial Society of Greater Harrisburg
1280 Clover Lane (Serves Central Pennsylvania) 17112
- PHILADELPHIA, Memorial Society of Greater Philadelphia
2125 Chestnut Street 19103
- PITTSBURGH, Pittsburgh Mem. Soc. 605 Morewood Ave. 15213
- RHODE ISLAND—See Massachusetts
- SOUTH CAROLINA
CLEMSON, Clemson Funeral Society, P.O. Box 1132 29631
(Serves Pickens, Oconee and Anderson Counties)
- TENNESSEE
KNOXVILLE, E. Tennessee Mem. Soc., P.O. Box 10507 37919
- MEMPHIS, Memphis Memorial Society, 292 Virginia Ave. 38106
- TEXAS
AUSTIN, Austin Memorial and Burial Information Society
4700 Grover Avenue 78756
- DALLAS, Dallas Area Memorial Society, 4015 Normandy 75205
(Serves Fort Worth and a wide area)
- SAN ANTONIO, San Antonio Memorial Society
7210 Northwest Loop Expressway 78213
- UTAH
SALT LAKE CITY, Utah Memorial Association
580 West Thirteenth South Street 84115
- VIRGINIA
ARLINGTON, Memorial Society of Arlington
4444 Arlington Boulevard 22204
- OAKTON, Fairfax Memorial Society, P.O. Box 128 22124
- WASHINGTON STATE
SEATTLE, People's Memorial Association
309 Aries Building, 2366 Eastlake Avenue East 98102
- SPOKANE, Spokane Memorial Assn., 2214 W. Sinto Ave. 99201
- WISCONSIN
MADISON, Madison Memorial Society, P.O. Box 4033 53711
(Branch of Planned Funeral Society of Wisconsin)
- MILWAUKEE, Planned Funeral Soc. of Wisc., Box 4444 53207

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All things are in process, rising and returning. Plants come to blossom but only to return to the root. Returning to the root is like seeking tranquility. Seeking tranquility is like moving toward destiny. To move toward destiny is like eternity. To know eternity is enlightenment, and not to recognise eternity brings disorder and evil. Knowing eternity makes one comprehensive; comprehension brings nobility; nobility is like heaven. The heavenly is like Tao. Tao is the Eternal. The decay of the body is not to be feared.

Lao-tse

Old People

Maybe we ought to be talking about old people more. And to them, too. And listening, for their sake as well as ours. Everybody born in the 19th century is at least 70 now. Maybe the Catalog ought to have a section by and about those old neighbors, finding out what's on their minds, learning what they remember, getting into their point of view. An Old Folks Page. For starters, here's an item from an unknown weekly newspaper, by an unknown older writer.

At first your younger associates begin calling you Uncle, Dad, or Pop. Then when you feel you are carrying your part with fellow workers and some one says: "Let me help you, Dad," the truth begins to dawn upon you that you are slowing down and your associates recognized this long before you were aware of the facts. It is possible to cover up this slowing process for a few years by being carefully on guard but eventually it will break out again and become more acute. When you begin to forget familiar names, leave out letters and words in writing, make miscalculations in business deals and bungle up things in which you were once an expert, you are

entering the first stages of old age and the environments that are a part of life's journey. Ex-communication set in, you are excluded from social, family and business meetings unless your financial standing is an asset to the success of such gatherings. If you do control the purse strings you are only a financial robot "on command."

When the preliminary requisites of old age are met and you start on the last lap of your journey you are isolated in your own home to be excluded from the outside world. You potter around, baby sit for your children and grandchildren while they are out enjoying the world. This affords some pleasure for a short while but as today's children offer little to prolong old age and when you no longer can tolerate this isolation and childhood vitality you are ready for the last lap of the journey which is offered in three different packages depending on the financial status of all concerned. Viz: A caretaker for you in your home, live with some of the family or go to a nursing home. In either case if a little forgetfulness, temper or discontent become noticeable you may be sent to a mental institution for a hurried journey to the end.

The end comes and relatives and friends gather around, weep and eulogize your past, leaving only the distribution of your estate and then oblivion. If there is little to divide each eligible person will select a momentum from your belongings as a souvenir, then sell, burn or destroy the remainder. If you were wealthy, your heirs (some you have never seen) will meet with a lawyer or administrator to fight over the spoils, leaving enmity that may remain through generations. This about completes the diary of most old people.

The writer is a passenger on this old timer train and as such, would like to offer in behalf of all travelers on the last lap of their journey the following: old people are still humans and like to be noticed by young and old. They are at their best both morally and spiritually and from experience both good and bad they can offer some splendid advice to younger generations if their services were sought more often. Being old, and tottery, does not destroy their love for humanity. Every one should respect old age because they too will be a passenger on this train some day and the golden rule will make the last few miles more enjoyable.

Birth

I love every one of you, but I must reluctantly beg to join those who plead for less do-it-yourself midwifery unless—and this is a HUGE unless—you have a hip doctor on instant, around-the-clock ambulance call, and a girl in attendance who has been through a practical-nursing course and can (AND WILL!) put her foot down if she sees any signs of trouble.

Take me, for instance. No one could have imagined I'd get into any trouble. I'd had two babies as easy as spitting. I thought I was a perfect risk for home delivery, but my nasty old spoilsport doctor talked me out of it. "Yeah," I thought, "She wants those high hospital fees."

Nevertheless, I went into the hospital. Grousing to the last minute about all that nasty red tape and inhibition of a woman's simplest function. Who, me, have trouble? Why, I dropped babies as easy as a Chinese peasant woman. And so on, and so forth, far into the night. And farther into the night. And farther yet into the—hey, damn it, that baby should have been here a long time ago and I was beginning to feel rottener than I (a prime natural-child-birth candidate with two births behind me) should EVER have felt.

Medication—I still felt worse. X-rays; no, not twins, just one block-buster. Anesthesia—not enough to put me out but enough to stop the screaming (and baby, I'm NOT a coward, I didn't utter yell one when I had a dislocated knee reduced without anesthesia since I can't take demerol.) Too late for a Caesarean. More anesthesia. And far into the night, with my husband's face whiter than I ever saw it, the doctor dripping with sweat, and finally a "blue baby", eleven pounds, bruised and scratched and one shoulder fractured in spite of the best O.B. in Berkeley. Ten minutes of straight oxygen to bring her round, forty stitches or so and (I think) a pint or two of blood in me. (I lay there and counted the damn stitches while they put them in. You can feel them even if they don't really hurt.)

Just imagine doing that in your commune?

Yeah. One woman screaming her head off for eight or nine hours. (As I say; I didn't even moan for No. 1 and No. 2). One dead—very dead—baby, probably, at the end of it, since only incredible skill revived this one. Probably one very dead, bled-out woman, too. Six or eight nervous amateur midwives . . . all of whom would have two inconvenient corpses on their hands, and be charged with being accessories before, during and after the fact of

- gross negligence
- practicing medicine without a license
- maybe even manslaughter.

Oh, brother, would you ever have your troubles. Not to speak of me and my baby—although our troubles might be strictly between us and the Keepers of the Gate to the next world!

I wonder how often it's happened that a bungled child-birth has destroyed a workable commune? Once would be too often.

So have your babies at home if you must, but for the love of God, send the girl to the local clinic for (1) prenatal care—the doctor will warn her if she's likely to have trouble. And even then it may come unexpectedly, as in my case, since I had NOT been so warned.

Send her STRAIGHT TO A HOSPITAL if she (1) bleeds, (2) has a history of swollen ankles or any signs of toxemia impending as in the Merck Manual, or (3) if her first baby has been over seven pounds or if there is more than six or eight ounces increase between her first and second babies; that means the third may be enormous. This



happens in pre-diabetic women who have no other symptoms. And finally (4) keep a telephone line open all the time she is in labor, so that if she manifests any trouble you can get hold of a doctor within minutes, preferably an ambulance.

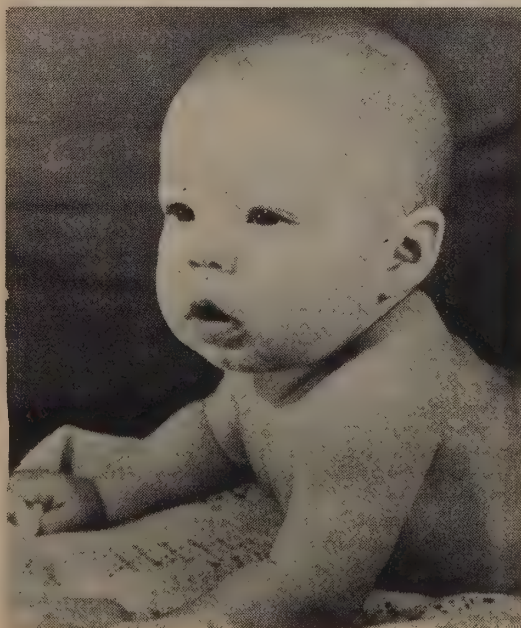
One birth in ten shows complications; one baby IN FOUR shows a birth defect—which can be aggravated if birth is hard or prolonged. Unattended births show the most serious oxygen starvation/anoxia-brain-injury which leads to mental retardation. And three births in a hundred are so complicated that without EXPERT medical help you may have a death on your hands, without warning. Don't say "It can't happen to you." I said it couldn't happen to me—but if I'd stuck to it and fled to the hills to escape that dehumanizing hospital I'd be dead, or at best seriously damaged with a dead child, or brain-injured baby to raise. Have you ever seen a badly brain-injured child? Visit your local hospital for the feeble-minded some day. Most so-called "idiots" and "imbeciles" are victims of brain injury.

I dislike many, many of the fruits of civilization. But modern obstetrics is one I'd sooner not dispense with.

Sure, having a baby is natural. So is dying in childbirth. Look in any medieval graveyard. Most men went through a few wives that way.

Love to you all,

Marion Zimmer Bradley (Breen)
Staten Island, New York



Being a woman who had a joyful natural childbirth and who nursed her baby for 2½ years, I was pleased to see *The New Childbirth* and the *Womanly Art of Breastfeeding* reviewed in your Fall 1969 catalogue.

When I recommend the breastfeeding manual, I feel compelled to reassure the prospective reader that it is very sound advice in spite of its syrupy prose. It is so sugar-coated as to make one suspicious.

The New Childbirth is an inspiring and practical book from England. Even more impressive, inspiring, and convincing is an English film called *Birthday*. Persons interested in seeing this film can rent it for \$25. per week or \$10. per show.

Write to Mrs. Ted Beals, 1122 Mixtwood Street, Ann Arbor, Michigan 48103.

Excerpts from *Birth Control Handbook* worry me so much that I hasten to issue a warning even before I have obtained and read it. They sound like something written from obstetrician's handouts (which are furnished to the doctor by the makers of pills, foams, etc.).

This literature paints a rosey picture of the "liberated" woman who may choose from one of many marvelous methods of birth control. It glosses over the failure rate and the side-effects. Worse, it fails to mention at all some very real dangers involved when a woman uses an I.U.D. Though we've all heard of the problems with the pill, very few people—some of them doctors, it would appear—know that an I.U.D. can transmigrate.

That is, it can pass through the uterine wall into the abdominal cavity. Sometimes it makes its escape through a tube. Surgery is the only means of removal.

My doctor knew, and did not tell me, that the loop he recommended so highly could transmigrate, even when I asked if it wouldn't irritate the uterine wall. So mine did.

No one can be certain just when my loop transmigrated. Those little strings disappeared soon after it was inserted but I was assured that it had just moved up or turned around.

I got pregnant and was assured that the loop usually comes out with the afterbirth and that if I didn't miscarry in the first 3 months I would probably have a healthy child. ("with an eye poked out?" I wondered) After 3 months I felt a little more relaxed.

At 5 months I miscarried. The loop didn't show up as predicted and THEN I was told about the phenomena of transmigration.

"Bad Luck" I might have said, had I been told when the device was first presented to me, of this hazard. Instead I felt victimized. It should have been my choice to risk it. It wasn't, because I didn't know that such a thing could happen. Transmigration is not uncommon. Women should know about it.

I would like to see a birth control handbook which deals with the problem realistically. One that gives you all the facts so you can make a choice fully aware of what you are doing.

Its nice that the book you have reviewed tells how you might obtain an abortion. Its comforting to hear that there are safe, clean abortions. But I can't help but feel that a hell of a lot was made light of in the one-sentence mentioning local anesthetics and antibiotics and pain-killers. Some ninny is liable to decide not to bother with birth control if an abortion is such a snap.

Sincerely,
Ann Hawkins
Washington, D.C.

The cities and freeways of California are a forecast of how the world, or at least the United States, may be one day, if it survives its various immediate crises. Whether that's good or bad depends on your point of view. It's apparently good for all those people still participating in the westward movement, flocking by the hundreds over the same trails and through the same mountain passes the trappers blazed a hundred and fifty years ago. I don't sympathize with it, but I understand that point of view very well. When I was growing up in Kentucky in the 1940's and 1950's, the people I was closest to were getting ready to migrate "west." Their Big Rock Candy Mountain, (or "land of the honey pond and the fritter tree," as my grandfather used to say) was actually Cincinnati, Dayton, Indianapolis, Chicago, Detroit; but the point remains the same: they were country people headed for the city, ex-miners, failed farmers, looking for a better place. My own path has been harder to trace, because it dips underground from time to time; but essentially it has been the same, metaphorically west from the country to the city, and actually west, to San Francisco Bay.

The strange thing, the thing that I had no way of foreseeing, setting out in a '51 Ford with no first gear and eventually no reverse either after I tried to back across the Sierras and failed, was that my curious road was going to take me from the country to the city, only to land me smack in the middle

of people much like myself, but ahead of me, who were working and planning or at least talking and fantasizing about getting back to the country again.

Practically everybody I know in California is talking about "the land thing." The visions I hear, almost daily, range from buying the northeast third of New Mexico, to getting a three-acre spread in Maine. People with access to half a million dollars of the old man's loot are in the same dream with people saving three dollars a week in a glass jar. Land. Rural land. Land in the direction of east. Western drive has brought us here. Eastern serenity, or the desire for it, is nudging us back again.

Probably everybody into "the land thing" would explain his motives in different, or at least personal, language. But I think the theme running through any variety of language would be the same. I think the thing we're talking about is no more or less hard to understand than the simple desire to have a home. A home, and a sense of home that can only grow out of a sense of place. Cities aren't places any more. They're scenes, projected on screens, then bulldozed away, neighborhood by neighborhood, like cancelled TV shows. People who are tired of scenes are leaving, or wanting to anyway, longing for a place, torn between the joy of getting out of town, and a vague despair that maybe there ain't no such thing as place after all, that

maybe all there is to do is ride around in outfitted buses, floating along the bloodless traffic arteries of the world.

I guess the essential thing that sustains me as I try to live in the California suburbs is the sense I carry around in my mind that, in fact, there are some places left in the world that are very nice, places left over from how the world used to be, continuing in a kind of time-warp that surrounds them like a shield. I'm sure there are similar places in every state. But the ones that I know about are in Kentucky, certain towns, certain counties that go on, and on. There's a social fabric in those places intact from their very beginnings as towns and counties, and what I wish is that that fabric could somehow be declared a national treasure, and given protection, like the mountain lion, or the California condor. That won't happen, of course. The fabric is already badly torn by new freeways and the coal industry, with strip-mining as its cutting edge. So I guess the best that one can hope for is that the surviving old places be studied as models for the new places about to create themselves.

Wendell Berry is a Kentucky poet, novelist, teacher and farmer who has written eloquently about his decision to leave New York and return to his Kentucky homeplace to invest his life. This excerpt from his essay, "A Native Hill," creates an image of a man who has the sense of place most of the rest of us are looking for.

A Sense of Place: KENTUCKY

We have lived by the assumption that what was good for us would be good for the world. And this has been based on the even flimsier assumption that we could know with any certainty what was good even for us. We have fulfilled the danger of this by making our personal pride and greed the standard of our behavior toward the world—to the incalculable disadvantage of the world and every living thing in it. And now, perhaps very close to too late, our great error has become clear. It is not only our own creativity—our own capacity for life—that is stifled by our arrogant assumption; the creation itself is stifled.

We have been wrong. We must change our lives, so that it will be possible to live by the contrary assumption that what is good for the world will be good for us. And that requires that we make the effort to *know* the world and to learn what is good for it. We must learn to co-operate in its processes, and to yield to its limits. But even more important, we must learn to acknowledge that the creation is full of mystery; we will never entirely understand it. We must abandon arrogance and stand in awe. We must recover the sense of the majesty of creation, and the ability to be worshipful in its presence. For I do not doubt that it is only on the condition of humility and reverence before the world that our species will be able to remain in it.

Standing in the presence of these worn and abandoned fields, where the creation has begun its healing without the hindrance or the help of man, with the voice of the stream in the air and the woods standing in silence on all the slopes around me, I am deep in the interior not only of my place in the world, but of my own life, its sources and searches and concerns. I first came into these places following the men to work when I was a child. I knew the men who took their lives from such fields as these, and their lives to a considerable extent made my life what it is. In what came to me from them there was both wealth and poverty, and I have been a long time discovering which was which.

It was in the woods here along Camp Branch that Bill White, my grandfather's Negro hired hand, taught me to hunt squirrels. Bill lived in a little tin-roofed house on up nearer the head of the hollow. And this was, I suppose more than any other place, his hunting ground. It was the place of his freedom, where he could move without subservience, without considering who he was or who anybody else was. On late summer mornings, when it was too wet to work, I would follow him into the woods. As soon as we stepped in under the trees he would become silent and absolutely attentive to the life of the place. He was a good teacher and an exacting one. The rule seemed to be that if I wanted to stay with him, I had to make it possible for him to forget I was there. I was to make no noise. If I did he would look back and make a downward emphatic gesture with his hand, as explicit as writing: Be quiet, or go home. He would see a squirrel crouched in a fork or lying along the top of a branch, and indicate with a grin and a small jerk of his head where I should look; and then wait, while I, conscious of being watched and demanded upon, searched it out for myself. He taught me to look and to listen and to be quiet. I wonder if he knew the value of such teaching or the rarity of such a teacher.

In the years that followed I hunted often here alone. And later in these same woods I experienced my first obscure dissatisfactions with hunting. Though I could not have put it into words then, the sense had come to me that hunting as I knew it—the eagerness to kill something I did not need to eat—was an artificial relation to the place, when what I was beginning to need, just as inarticulately then, was a relation that would be deeply natural and meaningful. That was a time of great uneasiness and restlessness for me. It would be the fall of the year, the leaves would be turning, and ahead of me would be another year of school. There would

be confusions about girls and ambitions, the wordless hurried feeling that time and events and my own nature were pushing me toward what I was going to be—and I had no notion what it was, or how to prepare.

And then there were years when I did not come here at all—when these places and their history were in my mind, and part of me, in places thousands of miles away. And now I am here again, changed from what I was, and still changing. The future is no more certain to me now than it ever was, though its risks are clearer, and so are my own desires: I am the father of two young children whose lives are hostages given to the future. Because of them and because of events in the world, life seems more fearful and difficult to me now than ever before. But it is also more inviting, and I am constantly aware of its nearness to joy. Much of the interest and excitement that I have in my life now has come from the deepening, in the years since my return here, of my relation to this countryside that is my native place. For in spite of all that has happened to me in other places, the great change and the great possibility of change in my life has been in my sense of this place. The major difference is perhaps only that I have grown able to be wholeheartedly present here. I am able to sit and be quiet at the foot of some tree here in this woods along Camp Branch, and feel a deep peace, both in the place and in my awareness of it, that not too long ago I was not conscious of the possibility of. This peace is partly in being free of the suspicion that pursued me for most of my life, no matter where I was, that there was perhaps another place I *should* be, or would be happier or better in; it is partly in the increasingly articulate consciousness of being here, and of the significance and importance of being here.

After more than thirty years I have at last arrived at the candor necessary to stand on this part of the earth that is so full of my own history and so much damaged by it, and ask: What *is* this place? What is in it? What is its nature? How should men live in it? What must I do?

I have not found the answers, though I believe that in partial and fragmentary ways they have begun to come to me. But the questions are more important than their answers. In the final sense they *have* no answers. They are like the questions—they are perhaps the same questions—that were the discipline of Job. They are a part of the necessary enactment of humility, teaching a man what his importance is, what his responsibility is, and what his place is, both on the earth and in the order of things. And though the answers must always come obscurely and in fragments, the questions must be persistently asked. They are fertile questions. In their implications and effects, they are moral and aesthetic and, in the best and fullest sense, practical. They promise a relationship to the world that is decent and preserving.

They are also, both in origin and effect, religious. I am uneasy with the term, for such religion as has been openly practiced in this part of the world has promoted and fed upon a destructive schism between body and soul, heaven and earth. It has encouraged people to believe that the world is of no importance, and that their only obligation in it is to submit to certain churchly formulas in order to get to heaven. And so the people who might have been expected to care most selflessly for the world have had their minds turned elsewhere—to a pursuit of "salvation" that was really only another form of gluttony and self-love, the desire to perpetuate their own small lives beyond the life of the world. The heaven-bent have abused the earth thoughtlessly, but inattention, and their negligence has permitted and encouraged others to abuse it deliberately. Once the creator was removed from the creation, divinity became only a remote abstraction, a social weapon in the

hands of the religious institutions. This split in public values produced or was accompanied by, as it was bound to be, an equally artificial and ugly division in people's lives, so that a man, while pursuing heaven with the sublime appetite he thought of as his soul, could turn his heart against his neighbors and his hands against the world. For these reasons, though I know that my questions *are* religious, I dislike having to say that they are.

But when I ask them my aim is not primarily to get to heaven. Though heaven is certainly more important than the earth if all they say about it is true, it is still morally incidental to it and dependent on it, and I can only imagine it and desire it in terms of what I know of the earth. And so my questions do no aspire beyond the earth. They aspire *toward* it and *into* it. Perhaps they aspire *through* it. They are religious because they are asked at the limit of what I know; they acknowledge mystery and honor its presence in the creation; they are spoken in reverence for the order and grace that I see, and that I trust beyond my power to see.

Wendell Berry's essays, including "A Native Hill" and "The Landscaping of Hell" have been collected in:

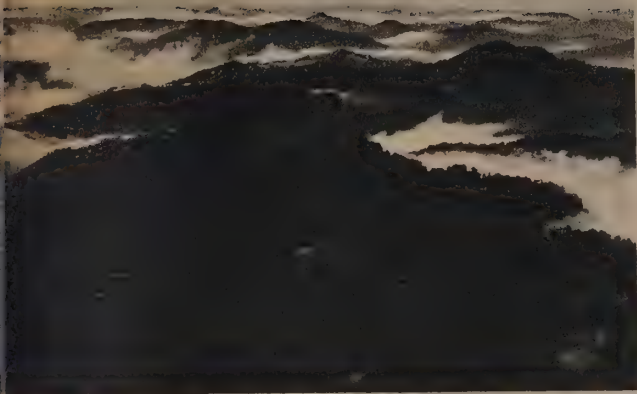
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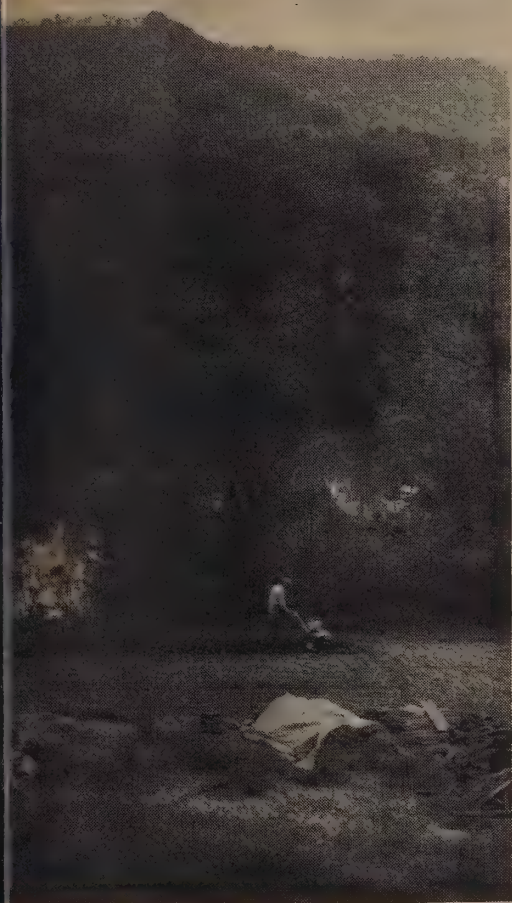


The farm Wendell writes about in "A Native Hill" is in northern Kentucky, an agricultural region separated from the Eastern Kentucky coal fields by the central Bluegrass counties. The following statement is an excerpt from another essay, "The Landscaping of Hell: Strip-Mine Morality in East Kentucky."



Standing at the edge of the bench of a new strip mine on the mountain in back of the coal camp of Hardburly, one can look down into a narrow cove at a house that might reasonably serve as model and emblem of the predicament of the whole region. As mountain houses go, this is an exceptionally good one. It has been well cared for. There is a neat grassy yard with a hedge fence, and a garden. The slope above it has been planted in young pines. One can see, even from the height of the mine bench, that a man has taken a proud stand there, has put into the place the long and dear investment of his attention and love and work and hope; that because of the expenditure of himself there he has come to be in that place what he would not have come to be in any other place on earth. And one cannot stand there looking down without some sense of the great value, the great human potential—beyond profit making and productivity, and all our other fashionable and belittling sociological measures—of that man's response to the demands and attractions of that place.

But overhanging the house on three sides is the spoil bank of the mine. When I was there—in dry weather, soon after the cut had been opened—the spoil was already beginning to slide. As soon as the winter rains have soaked the ground, great masses of muddy spoil will begin to flow down the slope toward the house, destroying the timber and all the life of the mountainside as it comes. Since there is no natural law that protects the plantings and buildings of men, it is probable that the descending spoil will eventually destroy the stand of young pines, the garden, the yard, and the house itself. Or if the slide stops short of the house, the acid water from the opened coal seam will get into the well and make it unfit to use. It will pollute and kill the stream in the crease of the cove; where it once ran clear and glittering over the rocks it will begin to slide over a residue of mine filth—yellow, greasy-looking, stinking, utterly dead. Waters farther down will be polluted in their turn. And following the pollution will come the rubble and mud, filling up the stream beds, increasing the hazard of floods, destroying



Wendell Berry on his farm.



the health and the beauty of whole valleys. If the man of the house is not forced to move out of the danger of the sliding spoil, if in spite of all he chooses to stay, then he will live in a place as ugly and desolate as a city dump—the place, his life in relation to it, his hopes, his work, all as utterly destroyed as if bombed. And what then will his dreams be, and his hopes? How will he live then without a bitterness that will corrode and destroy him—and that none might dare hope would destroy only him?

Or one might drive up the valley road along Clear Creek at the foot of the same mountain—feeling the quietness and pleasantness of the pretty valley, and then coming aware of the presence in the tributary coves of the gray looming masses of spoil; coming aware that one is entering a doomed place—to see the story's end, not in prediction, but in fact: a house literally swept from the mountainside by a flow of mud and rubble from a spoil bank. And below the house, seeing the sterile earth and rock and splintered timber already cramming in to choke the little stream that runs there, one realizes that through its comely valley, Clear Creek already runs as dead as a sewer.

Or one can travel the Little Shepherd Trail, recently built along the backbone of Pine Mountain to attract tourists to see the natural beauty of Kentucky. But even there if one wishes to specialize in natural beauty one dare not look to the east, for on that side, paralleling the Trail for many miles, the most prominent feature of the scenery is a huge strip-mine scar in the side of Big Black Mountain. After one looks to the east the mountains to the west will seem to stand precariously in the same storm light that surrounds the bison and the whooping crane. To look east is to receive the poison of a doom that one did not expect at all to come upon in the woods.

Most of the mineral rights in the Kentucky mountains were bought up sixty or so years ago, long before present mining practices had become imaginable, for as little as a dollar an acre. If the price were all that was objectionable in those transactions, that alone would be cause to suspect any good intentions ever professed by the coal companies. But that is far from all.

Most of these purchases were legalized by deeds that conveyed, in addition to the ownership of the mineral, the right to build such roads, tipples, pit openings, et cetera, as would be necessary to remove the mineral from the property. The Kentucky courts have until now held that this right implies the right to strip-mine a person's farm or tract of timber without further payment. In other words, the surface rights on a piece of property, the mineral rights of which are held by a coal company, are now virtually worthless. At any time it pleases, the company may overturn the surface and whatever is on it—timber, croplands, buildings, roads, graveyards—without paying compensation or damages. And the point is not that this is legally possible, but that it is *being done*. Now, in the mountains of East Kentucky, it is common practice. The following complaint, printed in *The Hazard Herald* on September 30, is not unique, but typical:

... they brought a scraper and pushed red dog from the road over into my garden and yard. When I got after them about this, they promised to get the red dog off my property and to replace my fence. My fence and fence posts are still lying flat on the ground where they left them. ... One of their bulldozer operators unloaded his bulldozer right in the edge of my yard, drove it over a weeping willow tree that was about fifteen feet tall, breaking the tree off level with the ground. The men ... told me that this ... operator had been shell shocked in the war so he didn't know any better. So one cannot help wondering if all of these men have been shell shocked as none of them seems to have any respect for the other man's property. Next, the culvert at Jack's Branch was stopped up, by mud, rocks, and trees ... and flooded my barn, my pig pen, washed away a large stack of lumber, and washed out my chicken lot.

You can call their representative about all of this, and he tells you he has nothing to do with it. ... Finally I managed to get a couple of calls through to this operator, but he practically makes fun of me for trying to get him to take care of the damage he has done to my property. I wonder what this man would do if someone treated him in the way he has treated me.

Place Destroyed: STRIP-MINING

On Frank's Creek in Letcher County I talked with Curtis Collier, whose story and whose seemingly unavoidable fate represent, for me, the story and the fate of the region. The Colliers are people with an admirable mindfulness of their community. Across the road from his son's grocery store, Mr. Collier has donated land for a park, and has built some of the playground equipment himself. When I was there children were swinging in the swings. It is a shady, pretty place, and the Frank's Creek community is a pretty community. The houses along the road up the floor of the valley are nothing like the sagging soot-stained shacks that have become symbolic of the region—and that are indeed prevalent in the valleys and hollows that have had a history of coal mining. The houses along Frank's Creek are modest and decent and well kept. They stand in clean, lovingly tended yards, surrounded by flowers and trees and bird-houses. Nearly all have good, ample vegetable gardens. Here and there one sees little white colonies of beehives. The slopes of the valley are thickly wooded. In the small fields

of the bottoms there are good crops of corn. There is everywhere the sense of amplitude and health—the sense that humanity has made a success here, and that an American promise has been fulfilled.

But now impending over this community is the knowledge that the slopes at the head of the valley, as well as some of the bottomlands, are soon to be strip-mined. Mr. Collier speaks out of a sense of doom gathering ahead of him. "Honey," he says, "it's going to be awful." Talking to Mr. Collier, and to his son and daughter-in-law in their store, one grows aware that a deep dread has entered into this place. The valley is tremulous with the anxiety of people about to face the death of what they have stood for and worked for and enjoyed—the death of their land, the death of their meanings. The familiar mountain has begun to loom over them as threatening as a volcano. When their valley is ruined, what will they do, where will they go, who will they be?

I rode with Mr. Collier over to some land he owns on Smith Creek, a tributary of Frank's Creek. We drove into a bottom-land pasture of about ten acres, well grown in clover and grass. We looked at Mr. Collier's fat Angus heifers, and ate some blackberries from a briar growing in the fencerow. Mr. Collier showed me the barn that he had built himself and filled from floor to roof with hay from the little bottom. It is an attractive, well-used piece of land, and it is a part of the basis and support of the life of an attractive and admirable man; badly crippled sometime ago in a mining accident, Mr. Collier takes pride in having needed no one to help him.

But the strip miners have already opened two seams of coal in the slopes at the head of Smith's Creek, the stream has silted up, and Mr. Collier has begun a desperate and expensive effort to keep it from breaking across his pasture and destroying it. With the mountain torn open, there is simply no way of foretelling or limiting the damage that will be done by the heavy runoff from the rains of the coming winter.

PART ONE

by Gene Youngblood

A concrete scientific alternative to politics now exists. For the first time in history it is now possible for society to shape its destiny completely outside the realm of political activity as we know it. Even the remotest possibility of a true alternative to politics should be sufficient motivation for each man to discover for himself whether or not it exists. But Buckminster Fuller's World Game is far beyond the planning stage. It is presently under way at Southern Illinois University, where a \$16 million computer complex is being constructed to serve as World Game headquarters.

There, at the site of Fuller's World Resources Inventory, a football field sized map of the world will be stretched out horizontally in the center of a huge arena some 600 feet long and 400 feet wide. From two levels of balconies approximately eight to ten floors above the map, viewers will be able to see the entire earth's surface simultaneously without any visible distortion of the relative size and shape of the land and sea masses. This huge cartographic Dymaxion projection of the earth will display the continents arrayed as one world-island in one world-ocean with no breaks in the continental contours.

The great map will be wired to serve as a giant visual display surface for information from a battery of high-velocity digital computers with megabit capacities approaching four million bits each. The computers will be located beneath the map in subterranean chambers, or in special structures adjacent to the display arena. The map's surface will be activated by the computers to show proportional data regarding the planet's raw and organized resources, world conditions and events, together with the history and trending patterns of world people's movements and needs. Remote viewing and operating consoles will be situated throughout the double balconies for personal interaction with the computers and their visual displays.

While the Illinois complex will serve as the central brain, World Game extension groups are being established at universities, colleges and centers all around the world. They'll be equipped with remote-control viewing and input/output subsystems linked with the central World Game

nullifying the universally-accepted Malthusian dictum that there's not enough to go around, that we must survive by a system of economics of scarcity. Fuller points to the fact that humanity has progressed from one per cent living in appreciable health and comfort in 1900 to forty-four per cent currently living at a higher standard than ever before—while at the same time the earth's physical resources have been steadily decreasing. Since this was not the objective of any nation, it is obviously the result of science and industry doing ever more with ever less.

For fifty years Fuller has been compiling an inventory of world resources, both physical and metaphysical. For the past two decades he's had a large staff and computer facilities, and the World Resources Inventory has become the world's most comprehensive collection of information about the status of planet earth. (A partial cross-section of this information is available in the six-volume set of "World Design Science Documents," published at Southern Illinois University.) It includes all the known amounts and locations of the physical resources of earth, their rates of consumption and regeneration, as well as all the metaphysical resources as represented by mankind's ideas, concepts and theories throughout history. It contains trends, known human needs, fundamental behavior characteristics as determined psychologically, anthropologically, ecologically and sociologically. It includes trends in population growth, population migration, birth and death rates globally, all political events, trends and consequences, all socio-economic developments around the whole earth.

In addition, the World Game now has access to all information from NASA's meteorological planet analysis and earth resources satellites. Equipped with special high-resolution 5000-scanline TV cameras in relatively low orbits, the satellites yield pictures equivalent to 100 feet above ground. (Higher resolution is possible but some countries complain of "invasion of privacy.") Sensors aboard the satellites are able to pick up unique electromagnetic and thermodynamic frequencies, and thus can recognize the specific temperature of different types of woods, flesh, furs, metals, etc. The satellites have been identifying, locating and counting the number of beef cattle grazing around the earth. Other sensors have been able to tell exactly what and where the living grain crop

On the basis of this totally comprehensive time/energy continuum, players will formulate World Game "moves in terms of variable solutions to the problems based on availability and development of resources at present and in the future, always doing more with less. A move which does not accomplish more with less will be considered invalid. These solutions will constitute individual "sessions" or playings of the game, but they'll never be added up or offered as "answers." Instead they'll be reinserted into the computers where they'll be evaluated against the many other incoming solutions. The game will never end. The overall program simply will be continually modified to accommodate mankind's increasing metaphysical wealth as represented by World Game solutions, which in turn will mean greater control over our physical destiny without resorting to ideological premises.

A branch of the World Game effort will be devoted exclusively to disseminating its findings to the communication channels of the world—the intermedia network of television, radio, newspapers and magazines—in ways which will dramatically relate World Game discoveries to political and social events occurring simultaneously. For example, it will be possible to prove with undeniable scientific accuracy that a food shortage in a particular section of India was the result of this or that political maneuver. It is expected that within five to ten years the World Game will have attained such a high degree of analysis and evaluation that the entire physical and metaphysical events of the day may be explained and solutions offered on a daily basis concurrent with the evening news.

Fuller: "Politicians are going to confess the obvious—that no human beings can keep in mind all the special interests of all people and all the whereabouts and unique behaviors of all the resources of earth. No human beings can persuade other people to behave in unfamiliar, untried ways, but the computer can integrate and disclose the critical information and be completely convincing. . . . As the World Game is played progressively it will disclose a myriad of politically untried, unprecedented yet effective ways of solving hitherto unsurmountable problems. These will become big news items of the world's press and international wire services. As man gets into more critical proximity to a full-scale World War Three, the people of the world will

Buckminster Fuller's

Inventory. (I'll be conducting one such group next year as a faculty member of the California Institute of the Arts.) With this network of ultra-sophisticated technology, a giant world logistics game will be played by individuals or groups all around the world, using a series of computer programs based on principles of Game Theory, General Systems Theory, input/output theory, etc. Called "The World Game," it is basically a reversal of Dr. John Von Neuman's widely-used Game Theory of military strategy, such as practiced in the computerized brain trusts of the Rand Corporation and the Pentagon.

Militarists attempt to pre-experience the probabilities and consequences of world war by using Von Neuman's Game Theory in terms of optimum logistics and ballistics presently available. Game Theory is always played on the axiomatic assumption that it's either "them" or us, that there's not enough world resources to support humanity, and therefore only the fittest survive, armageddon is inevitable. (This is the only reason sovereign nation-states exist in the first place.) According to Game Theory, someone must lose. The name of the game is Divide and Conquer.

According to World Game, no one loses. The name of this game is United We Stand. The World Game is mankind's first historical attempt to solve whole-earth problems, not just local ones (because no problem is exclusively local), and on a scale previously available only for war gaming. The object of the World Game is to make the world work successfully for all human beings. "The objective," Fuller explains, "is to explore for ways to make it possible for anybody and everybody in the human family to enjoy the total earth without any human interfering with any human and without any human gaining advantage at the expense of another. The programs that the computers will select as being most favorable for all humanity will go far beyond man's ignorant ways of assessing what he 'can afford.' The computers will demonstrate that he can afford nothing short of the best, which is to make spaceship earth a successful environment for man. If anyone playing the game employs ideological biases and attempts to enforce the dominance of one by another, that player will be disqualified. The game must be won by peaceful means, by the use of intelligence and proper use of our resources. The players will not compete. They will engage in cooperative exploration to see how all humanity can win a successful, pollution free life."

Fuller asserts, after fifty years of study, that science has proven this possible. He asserts also that world history during these seventy years of the 20th century has proven that mankind increasingly accomplished more with less, thus

is. For the first time in history, world man can learn exactly where both his shifting and fixed resources are, and in the digital computer he has a brain capable of storing and retrieving this information on a scale impossible for all of humanity to match.

Not only does the World Resources Inventory show where all the people on earth are located and how they're moving about, but the total weather pattern as well. The total weather pattern will be correlated with the total crop pattern. We will know where the rains are, where the cattle and crops are, and how the weather may eventually be guided to insure the crops. The inventory includes world food production per year in metric tons, locally, nationally and globally. It shows the entire coal and iron resources of the earth and their rates of consumption. (A typical finding of the World Game is that there's more tin above ground in the United States than there is underground in the rest of the world.) You can learn the total tonnage of fibers produced per year, globally or locally, broken down into kinds of fibers. The inventory shows how many persons in Africa and Asia own radios, television sets and appliances. Trends show total energy consumption, electrical and thermal, around the whole globe.

Armed with this arsenal of constantly-updated information about the world's wealth, dedicated revolutionaries around the globe will set out to render politics obsolete as they disclose methods to make the whole earth successful by playing the World Game. Humans everywhere, from students to scientists—disenchanted with politics yet finding no solution in violent revolution—will discover a direct and constructive mode of activism in the World Game. Global information is the natural enemy of local government, for it reveals the true context in which that government is operating. Global television is directly responsible for the political turmoil which is increasing around the world today. The Nixon administration senses this and is beginning to react, but it's too late. Television makes it impossible for governments to maintain the illusion of sovereignty and separation which are essential for their existence. Television is one of the most revolutionary tools in the entire spectrum of technoanarchy. World Game players will make dramatic use of television all around the earth.

The Game will proceed in the following manner: with the hardware and software described above, coded displays of world problems will be viewed singly or in relation to one another, and will permit retrospective viewing of past historical and present trending patterns. Various trends will be extrapolated and compared in future time increments.

begin to say in increasing numbers, 'Now that we can see a way in which this and that can be done, we must obviously adopt the policies indicated by the World Game.' Popular pressures will gradually force world politics to yield to these mutually-beneficial World Game programs."

Fuller admits that mankind may already have violated its occupancy of spaceship earth beyond the point of tolerance. Of all the trends and patterns which his work has revealed, none stands out so clearly as that of man's inherent blindness, ignorance and indiscretion. Never in history has mankind consciously behaved in its own interest, but rather has stumbled blindly and accidentally into success, leaving a trail of waste and pollution. But time has run out. This wheel's on fire, and it's rolling down the road. "Our greatest problem," he says, "is the educational problem of getting man to realize in time what his problems are, and what the most effective priorities may be for saving them."

PART TWO

Following is a report on the first World Game Seminar as conducted by Fuller and Edwin Schlossberg at the New York Studio School from June 12 to July 31 of last year. Schlossberg, 24, is working on a Ph. D. in physics and literature at Columbia University, considering both of them as languages. He teaches a combined course in physics and literature. He is a generalist, a comprehensive thinker, a poet, a revolutionary, a technoanarchist. He publishes GOOD NEWS, a periodical of the whole earth design systems revolution.

The seminar was offered as a prototype of the World Game and should not be considered a formal "playing," since the necessary computer systems were not yet available. However, this report—compiled by Medard Gabel—should demonstrate the vast scope and authority of the World Game even when practiced by amateurs without the optimum technological facilities.

We worked with the students in mind. We worked to develop a research and design team to effectively deal with the data and concepts necessary to play World Game. The first four weeks of the seminar were devoted to input. Mr. Fuller thought aloud about his ideas, concepts, inventions, and discoveries. The students did individual research into trends, energy sources, and many other information areas. They were constructing a base on which to develop ideas about the whole earth. We saw films, read extensively, and traveled through the minds of the others in the room. We watched as man successfully stood on another body in space and could see

the earth as a spaceship. The students were working to make visible the coordination of that spaceship in order to accelerate the trend toward physical success for all humanity.

Each day the growth of the students and the growth of World Game was extraordinary. Without fear, without competition, the students worked together to realize World Game as fully as they could. The last three weeks were intense with research and organization on how to display the findings that were being made. The energy and information grew visibly before us. We were working at the frontier and each student was working at his frontier. It is dramatic to see human beings so concerned with the operation and well-being of the earth. Mr. Fuller said at the start of the project that it was the most important work to be done.

I. PRE-SCENARIO FACTS.

Our pre-scenario facts consist of the conceptual tools which we found ourselves using most often in our dealings with the whole earth. They are by no means even an attempt at being complete, but are merely a general frame of reference for us, as individual participants, to fit our respective specializations into. To a large extent the specifics of World Game left with its participants; what is here is the general base we started with and evolved through as our individual understanding and refinement grew.

Finding the needs of one man led us to finding the needs for mankind. As we began to deal with man on the collective level we realized the need for establishing a frame of reference, or conceptual tool, to deal with collective mankind's needs. The "bare maximum" was what evolved. Rather than take what was thought to be the bare minimum for mere subsistence levels, we elected to establish levels which would allow man to realize, not his minimum potential, but his maximum potential, anything less than this being, by our definition, sub-human. So, in looking at calorie levels, we found the highest calorie needs to be that of pregnant women who need 3300 cal/day, and that of working men who need 3500 cal/day. Thus if we could insure that caloric level for the world, no one would be deprived. We did the same for protein levels. Between 30 and 45g of total protein per day is the minimum level of protein that must be replaced by the body. We therefore took 90g of protein/day as the bare maximum which should be

Dymaxion maps with five clear acetate overlays each to visually present our data on a geographical whole earth. Information about the world's metals sources, world man, the power network, alternate power sources, present population and Year 2000 population projection, food production and transport, was presented on seven of the overlays while three remained free for use during game-playing.

II. SCENARIO.

Once we knew what mankind had and what he needed to have, we began to experiment with ways he could go about getting his needs. These ways we called "scenarios." (What are the ways in which man may be enabled to participate more effectively in his relation with the universe?). Throughout our work we found ourselves returning to one common denominator: Can you industrialize an area without electrical power? How can man take care of all of his essential physical needs so as to allow himself to develop his unique metaphysical abilities? Whether we had researched food, communications, travel, housing, or economics, we always returned to electrical energy once we began to formulate any hypothesis about satisfying man's needs. In order to enable people to be fed properly we found that they would first have to have a sufficiently high input of electrical energy to process, transport, and store food and dispose of wastes. We found that, when dealing with collective mankind, it was imperative that we attend to man's external metabolics first, and these would then take care of individual man's internal metabolics. Thus the "Energy Scenario" became our first move in the World Game.

After researching and then plotting the world's electrical network (generating stations and transmission lines) we devised a way of developing and improving its overall efficiency as the first step towards the bare maximum for all mankind. (How long would it take to get a minimum of kwh distributed throughout the world?) By utilizing the world's hydroelectric power (rivers and tides), without any further development of thermal plants, and taking advantage of the increased efficiency of super-high voltage long-distance transmission lines (one million volts, 1500 miles) in a day/night seasonal hookup, we were able to demonstrate that with present methods, technologies, projected population

(How can we accelerate efficiency throughout the world?) We chose to keep efficiency levels and technological competence at present levels to show we could do this today, with what we have. (How much metal is needed for 100 miles of power lines? When is a game a game?)

After demonstrating man's potential competence for bringing the world average per capita kwh up to 3613 with no one below the present European level of 2000 kwh, stage two of the electric scenario began. Utilizing increased efficiencies, technological progress such as laser-beam power transmission, and some of the earth's varied income energy sources (What is the potential kwh from wind power? Tidal power?), the per capita level of kwh is brought up to the 15,000 bare maximum in the year 2000.

Furnishing an area with enough electric power for its industrialization brings to that area the potential to satisfy its bare maximum food requirements. Knowing from the energy scenario that we could count on using two per cent of the total electric power for agricultural uses, we then looked at ways to increase the per capita calorie and protein levels to the bare maximum. (What percentage of electric energy is essential for food production?) A startling fact which became obvious upon looking at food production was that the world produces more than enough to feed its people adequately, but that in transport, storage and processing, 90 per cent of the tonnage of food is lost (how do we identify waste?). If we could bring methods to increase worldwide efficiency, at the rate we increased food production in the past, the world could feed its population for some time to come.

Shipping food halfway around the globe is inefficient. For example, in 1967, Asia imported and exported the same amount of rice. Ships could be used to transport materials not native to a particular area, or the metal from the ships could be used more profitably elsewhere. Part of the electrical power set aside for agriculture could be used to increase efficiencies in short transport to some areas with low farming efficiency. The increased use of fertilizers and farm equipment, in addition to the increase in knowledge of farming brought about by higher communications capabilities, would help bring the needed increase in efficiency necessary to have the entire population at bare maximum by 1980.

WORLD GAME

available to everyone. We then asked: How many acres per capita are necessary to produce the bare maximum food requirements?

In order to supply mankind with his internal needs we found it necessary to evolve a bare maximum parameter for external metabolics which would guarantee the maintenance of man's internal metabolics. This bare maximum is 1242 energy slaves per capita by the year 2000. (Note: one "energy slave" is defined as a machine or system equivalent to 37.5 million foot-pounds of energy). Broken down, that is 15,000 kwh and eight metric tons of coal-equivalents per capita per year. This non-linear yardstick for establishing external relative levels of the development of man's potential to be "human" was arrived at by taking the projected U. S. needs for the year 2000 (present need is 7000 kwh), because it was the maximum. Using these parameters we found that mankind will need a total 100 trillion kwh, 8.5×10^{15} calories, and 21.9×10^7 tons of protein in the year 2000. (We used the U. N. figures on projected populations for these calculations.)

We compared bare maximum requirements with present per capita consumption. We sought to establish a bare maximum communications system for the world. We learned what percentage of world people can presently be guaranteed the bare maximum. We sought to find the bare maximum for world transportation. We asked how much bulk food is produced in calories? How much copper, aluminum and steel is involved in production? (At present, it takes 42 kwh to produce one metric ton of food.) We sought to find the average per capita protein consumption for the world (68 grams, of which 20 are animal protein).

In order to correlate the vast amounts of data we were accumulating about the world, we devised a chart with which we could clearly display visually our basic working information. This chart was a triangular grid on which one of the three axes were the 22 major geographical areas of the world and their individual countries. The second axis consisted of, in five-year increments from 1965 to 1000, figures on population, population density, calorie and protein intake, total kwh, metric tons of coal-equivalents and energy slaves. The last axis could indicate up to 20 possible world-trends for each area and country. We used thirteen: fossil fuel potential, life expectancy, mortality rate, arable land, housing, amounts of copper, aluminum and steel, food literacy, reinvestable time and hydropower.

The chart was four feet high and stretched 60 feet around the game room. We also employed two 10-by-15 foot

figures, metals resources, and efficiency levels in power generation and consumption, it would be possible to bring everyone on earth to a minimum of 2000 kwh per year by 1980.

The present kwh level of Europe is 2000, and as such not below our projected bare maximum of 15,000 kwh for the year 2000, because with Europe's level of industrial development it would be possible to raise the per capita kwh to 15,000 by the year 2000. We asked: How much copper wire is needed to carry the power necessary for the year 2000 for both industrial and home use throughout the world? How far ahead can we conceive a future life-style? What's the time-lag between installation of electrical energy and an adequate food supply? How much metal is involved to produce the kwh needs for the year 2000?

When the energy input of an area is raised, there is a corresponding rise in communications capacity which in turn increases the necessity of the "have-nots" to become "haves." (In 1938 Fuller determined that when the equivalent of the work that could be done by 200 human slaves was available in electrical and other energy units used by a family of five, that family is included among the "haves.")

In the scenario, the vast hydroelectric potential of both South America and Africa is utilized to raise their respective levels to the per capita figure of 2000 kwh, and the surplus is transmitted via the electric network to areas where there are deficits of electric power. Because we do not have a global network at the present time, the U. S. and other industrialized countries produce and use during the night hours only a small percentage of their electrical power capacity. With a global electric grid, power could be generated at day and night total capacity and transmitted to the day-time peak needs around the earth. (Using our present technology, can we provide electrical needs for everyone without polluting our air beyond endurance? What is pollution?)

The scenario utilized hydroelectric power for other considerations than what is presented above; besides the efficiency and pollution problems of thermal plants, it became overwhelmingly apparent that our "savings account" of fossil and nuclear fuels would soon be depleted at the bare maximum level of consumption. Our constantly-replenished "income" energies were the obvious choice. The amounts of metals, principally copper, aluminum and steel, that would be needed for such an undertaking are within grasp of earth's present economic and industrial development: approximately 9000 tons of steel per 1000-million watt hydroelectric plant, and 60 tons of steel and 25 tons of aluminum for a mile of power line at present efficiencies.

The efficiency would be somewhere between the U. S.'s (feeding about two people per acre) and Japan's (feeding six people per acre). It would be difficult to raise the world's efficiency to that of Japan's, using her methods, because a tremendous amount of manpower would be drawn into agriculture. (Approximately 40 per cent of Japan's people are engaged in agriculture as opposed to nine per cent in America.) There are many new ways to produce food. Examples: using algae (chlorella and others) for food; feeding bacteria plant wastes such as stalks, sawdust, and letting them convert these to food for man; and synthesizing amino acids. However, we didn't employ them in our scenario because we did not want to make a move which would assume changing people's food habits.

At present, most of the important variables in farming are not controlled because the system is as yet open. In a closed system such variables as weather effects, insect pests, loss of water and nutrients would be controlled, or the detrimental effects eliminated. One experimental system could feed 500 people per acre—which would mean a population of six billion people could be fed using only 24 thousand square miles of land. (We're now using around 7 million square miles.) This would be approximately the area Japan uses to feed her people today.

Given enough electrical power, the external metabolics, the earth could feed as many people as she needed—up to 7.8 trillion, for example, on presently-farmed land using the aforementioned experimental system. From this scenario we went on to examine some of the effects these scenarios would have on other areas of man's life.

III. FUTURE DIRECTIONS.

After working out scenarios for satisfying what we considered the two most vital bare maximums—external electric energy and internal food supply—we evolved into some of the possible synergetic scenarios that would result from the first moves. The establishment of bare maximum levels of the above throughout the world would engender the need for bare maximums in housing, medical attention, income, communications and travel.

The housing scenario we were working on clearly showed the inadequacy of our present system. At the present rate, the use of metals in housing would prove to be totally insufficient. Metaphysically-engendered materials such as plastics will have to be developed if we are to solve mankind's housing needs. The housing scenario encompassed more than just the shelter needs of the world. As it evolved, we saw that it would encompass communications and mobility. With the trends of increasing mobility

THE WORLD GAME

throughout the world, we foresaw the possibility that no one would be staying at any one place long enough to warrant the construction of "permanent" shelters. As a total service facility, the housing needs would encompass not only shelter but communications—with its own resultant education, medical information and attention, personal telephone contact with anyone, anywhere, and mobility with anyone going anywhere. These would be accomplished via closed-circuit television and telephone to a world central medical, educational, and travel-routing computer system.

Some future directions and scenarios we touched upon were the possibilities of a world guaranteed annual income; the potential of fluidics as a source of energy; information and automation; the use of heat pollution from thermal electric plants to heat soil to improve crop output; the efficiency-gain by using gasoline or alcohol to run electric power plants and electricity to run cars; the production of alcohol from algae, farm wastes, or garbage and its substitution for gasoline in present-day combustion engines; the laser beam transmission of power and information; the amount of reinvestable time that will be available to mankind as a result of freeing him from the drudgery of having to earn a living (by bringing man to the bare maximum food and energy levels by the year 2000 we will have 16 trillion more hours per year to reinvest into metaphysical regenerative functions); the increase of efficiency rates for power production and consumption, communication, transportation, etc., and the possible surplus and increase of efficiency through the stabilization of the population.

PART THREE

(A postscript by Gene Youngblood)

A World Game strategy conference was held at the World Resources Inventory in Carbondale on Wednesday, March 18. Plans were discussed for national and international development of World Game during the next four months. Following is a brief summary of the conference:

Until the present time the World Resources Inventory has been supported by Southern Illinois University, contributing 75 per cent of the costs, and by Mr. Fuller personally contributing 25 per cent. In 1967 the Illinois State Legislature authorized a grant of \$4 million to World Game, providing that an additional \$12 million was obtained from other sources first.

It now appears that the total \$12 million goal soon will be achieved. In April of this year federal legislation

(already submitted) is expected to result in a \$12 million grant to World Game from NASA.

World Game Director Tom Turner stressed that "no strings" were attached to the funding. It was made clear that in no way will the affiliation with NASA, as a governmental agency, constrain or compromise the apolitical integrity and efficiency of World Game.

Applications for financial support have been submitted to more than 200 American foundations, and plans are under way to seek foreign support as well. Individual contributions of one dollar or more, sent to World Game headquarters, are equally welcome.

Mr. Fuller will address world leaders at a special session of the United Nations in New York this April. A graphic presentation of World Game processes and scenarios will accompany Fuller's address.

The newly-formed information office of World Game is preparing several projects, including several television programs, articles in national magazines, and a regular weekly series of articles on World Game syndicated to 85 college newspapers in the U.S. and Canada. A regular World Game newsletter will begin circulation shortly.

Meanwhile plans for the football field-sized display center have been abandoned. Preparations are now under way for construction of a \$3 million World Resources Simulation Center to be located at S.I.U.'s Edwardsville campus. Plans call for a 195-foot Tencor clear-span dome to be installed by 1971. This will serve as display center until approximately 1978, when a 400-foot dome will be added to the smaller one, making a total facility of more than \$20 million. The World Resources Inventory, or "Information Central," will remain at its present location in Carbondale. Turner emphasized that Carbondale will be an information center only, offering logistical support, and will not function as a management center.

The Wolf Computer Corp. of New Concord, Mass. has received a contract from S.I.U. to develop a computerized visual display system. William Wolf, former student of Norbert Wiener at M.I.T., was one of the first computer programmers in the United States and is considered among the most prominent. He's working with a \$12 million Navy SACE computer, equipped with thirty different 24-inch CRT display consoles and twenty operator eyeboards. The machine also is capable of optical scanning for visual display, and light pen interaction with visual information.

In addition, negotiations are under way to share time on the world's most powerful computer, Illiac 4, which will be housed at Champagne, Ill., by December of 1970. Illiac is 500 times as powerful as any existing computer.

Meanwhile several World Game extension groups have been established in the U.S. and Canada. Interested schools, groups, or individuals are encouraged to contact World Game for assistance in establishing an extension project. The address is Tom Turner, Director, World Game, Southern Illinois University, P.O. Box 909, Carbondale, Illinois 62901. Telephone: (618) 457-8064. At some point in the future World Game hopes to be able to provide such groups with funds. This capability, however, is not yet available.

A list of five World Game extension study groups and their respective activities:

Max Ackerman (Director)
McGill University, Montreal
Home Address: 3925 Plamondon Ave., Apt. 8
Montreal, Quebec, 249, Canada
(Developing World Game as new curriculum for higher education.)

Dr. Val Winsay (Director)
Assoc. Professor of Anthropology
Pace College, New York, N. Y.
(Studies values, beliefs and cultural attitudes as they affect success of World Gaming.)

William Wolf, President
Wolf Computer Corporation
New Concord, Massachusetts
(Developing computer applications of World Game.)

Gene Youngblood or Peter Pearce (Directors)
California Institute of the Arts
2404 West 7th Street
Los Angeles, California 90057
(Integrating aesthetics of World Gaming concepts.)

Herman Wolf
World Game Information Officer
285 Golden Hill
Bridgeport, Connecticut 03304
(Developing television and media information channels.)

Direct all inquiries to:

Tom Turner, Director World Game
Southern Illinois University
P. O. Box 909
Carbondale, Illinois 62901
Tel: (618) 457-8064

Parts one and two of this report first appeared in the *Los Angeles Free Press*. 25¢/copy. \$6/year. From: L. A. Free Press, 7813 Beverly Blvd., L.A., CA 90036

Ecology

The Environmental Handbook

The Environmental Handbook prepared for the first National Environmental Teach-In, edited by Garrett De Bell and published by Friends of the Earth, Ballantine, is now available in bookstores and direct from ZPG. The *Handbook* was conceived in the final days of the November UNESCO Conference in San Francisco as a sourcebook of information with suggestions for action as well as analyses of the problems. It contains some of the most important articles published in the past by authors such as Paul Ehrlich, Garrett Hardin, Lynn White, Kenneth E. Boulding, Robert and Leona T. Rienow, and David Brower. Original articles were contributed by a number of authors including Gene Dubos, Kenneth Cantor, Marion Edey of Friends of the Earth, Barbara Parker of Berkeley Ecology Center, Michael Perelman of Berkeley Ecology Action, Harrison Wellford with the Center for Study of Responsive Law in Washington, and Steven Wodka of the Oil, Chemical and Atomic Workers International Union. One long section of the book is on "Eco-Tactics, Suggestions for Personal and Political Action" and includes a large number of ideas for change. One of the purposes of the handbook is to provide both the background knowledge and specific suggestions for people asking "What can I do?"

Another purpose of the book is to answer questions people in the ecology movement get asked every day. This will help in giving succinct answers to those who are entirely new to the concept of ecology.

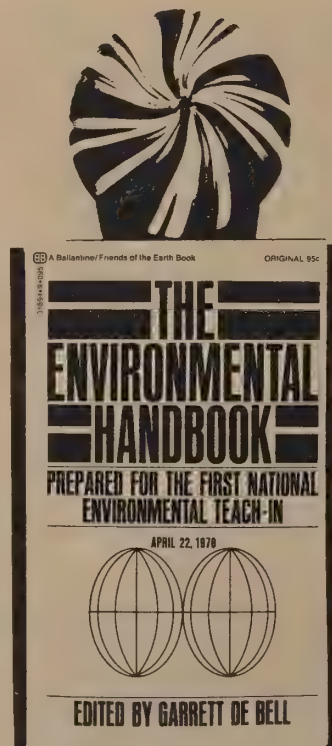
Review from Zero Population Growth's *National Reporter*, 367 State Street, Los Altos, California 94022.

By conventional bookkeeping methods, for example, the coal companies strip-mining away the hillsides of Kentucky and West Virginia show a handsome profit. Their ledgers, however, show only a fraction of the true cost of their operations. They take no account of destroyed land which can never bear another crop; of rivers poisoned by mud and seeping acid from the spoil banks; of floods which sweep over farms and towns downstream, because the ravaged slopes can no longer hold the rainfall.

John Fischer

Of the three areas—downtown, the suburbs, and the middle city—it is the middle city which is the only matrix for new culture. Downtown does not create new culture; it merely markets it to the suburbs. The middle city will be the first to reclaim its environment, the suburbs second, and downtown last. The downtown environment will be reclaimed when the middle city defeats the bid of downtown for its territory and when suburbia becomes self-supporting communities.

Berkeley People's Architecture



The Environmental Handbook
Garrett De Bell, Ed.
1970; 365 pp.

\$.95 postpaid

from:
Ballantine Books, Inc.
101 Fifth Avenue
New York, N. Y. 10003

or WHOLE EARTH
CATALOG

When writing press releases or dealing with reporters, remember the media are always looking for new metaphors and good ideas. Questions such as: What is ecology? Why are you involved in it? What do you hope to accomplish by holding a teach-in? are going to be asked again and again. Be prepared to answer very broad questions like these in one or two sentences which are concise and interesting. The person doing PR should not only be informed and able to handle a variety of rhetoric but should also be interesting or unusual in his own right. Put yourself in the reporter's shoes: what is it about you, your group, and your activities that would make a good story?

Barbara Parker

More than three and a half billion people already populate our moribund globe, and about half of them are hungry. Some 10 to 20 million will starve to death this year. In spite of this, the population of the earth will have increased by 70 million in 1969. . . . It took several million years for the population to reach a total of two billion people in 1930, while a second two billion will have been added by 1975!

Paul Ehrlich

The Environmental Handbook as "the bible" of New Conservation. Paul Ehrlich, the others, as prophets predicting the literal end of the world. Ecology Action, the others, as young disciples working zealously to save it. The Survival Walk from Sacramento to L.A. as a modern version of the crusades. The public outcry against pollution as an evangelical call to cast out evil. San Jose State students actually burying a devil alive, in the form of a new Maverick.

While Lynn White Jr. says: "Human ecology is deeply conditioned by beliefs about our nature and destiny—that is, by religion. . . . The victory of Christianity over paganism was the greatest psychic revolution in the history of our culture. . . . We continue today to live, as we have lived for about 1700 years, very largely in a context of Christian axioms. . . . Christianity, in absolute contrast to ancient paganism and Asia's religions . . . not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends. . . . [Christians] are superior to nature, contemptuous of it, willing to use it for our slightest whim."

Conservation asking Christian America to quit being Christian America, America saying can't, I need the money.

Psychic revolution. Beginnings of religious war. Christ a space-age anti-Christ. Battle in the cockpit. Veer left, veer right. 66,000 miles an hour. Off course! Quick! Somebody grab the wheel!

I personally doubt that disastrous ecologic backlash can be avoided simply by applying to our problems more science and more technology. Our science and technology have grown out of Christian attitudes toward man's relation to nature which are almost universally held not only by Christians and neo-Christians but also by those who fondly regard themselves as post-Christians. Despite Copernicus, all the cosmos rotates around our little globe. Despite Darwin, we are *not*, in our heads, part of the natural process. We are superior to nature, contemptuous of it, willing to use it for our slightest whim.

Lynn White, Jr.

Education, particularly higher education, is critically important to solving our ecological crisis. . . . The whole direction and purpose and thrust of our culture is toward greater production, greater exploitation. In many if not in most of our universities, there is little criticism of the basic assumptions and value judgments that underlie our current priorities. The university is quite capable of developing an automated machine to harvest almost any crop, but it is unable to evaluate the long-term social costs of such a development.

Garrett De Bell

One of my great joys as a kid was helping my grandfather slop the hogs. Hogs are a little cumbersome in suburbs, not to mention illegal. But what zoning inspector could object to worms? I slop mine with kitchen garbage every other day and no one knows but the worms and me. As they reproduce themselves, I plant them here and there around the yard, or give them away to friends. They only cost about \$4.00 a thousand. You can order them from classified ads in *Organic Gardening* magazine. One worm ranch, Jerry Klieger's Mill Creek Ranch, (Noel, Missouri 64854) distributes little mimeographed pamphlets about worms. Here's an excerpt:



South American Indians worshipped the earthworm. New Zealand Maoris ate the earthworm.

And Americans? Americans are killing off the vital earthworm with chemical fertilizers.

They're rapidly killing off the world's mightiest soil builder and soil enricher.

"When I was a child, I remember how so many earthworms would crawl out of the ground after a hard rain. Now, I never see a worm! What has happened to all the earthworms?" I'm often asked.

The answer is that the invaluable earthworm population has been drastically and tragically reduced by heavy post-war use of chemical fertilizers.

Earthworms—nature's fertilizers—never harm any living thing.

They've never killed a bird nor burned a root. They've never upset the balance of nature. Instead:

- Earthworms fertilize the soil as can nothing else.
- Earthworms add rich topsoil.
- Earthworms neutralize the soil.
- Earthworms provide roots with essential oxygen and ions.
- Earthworms cause stones to sink and seeds to germinate.
- Earthworms bring up as much as 30 tons of soil annually, per acre, to the surface.
- Earthworms enable gardens, trees, shrubs, lawns, to grow faster, healthier, greener.
- Earthworms provide drought resistance.
- Earthworms prevent erosion, promote drainage.
- Earthworms, placed in small numbers around trees, shrubs, will greatly speed growth.

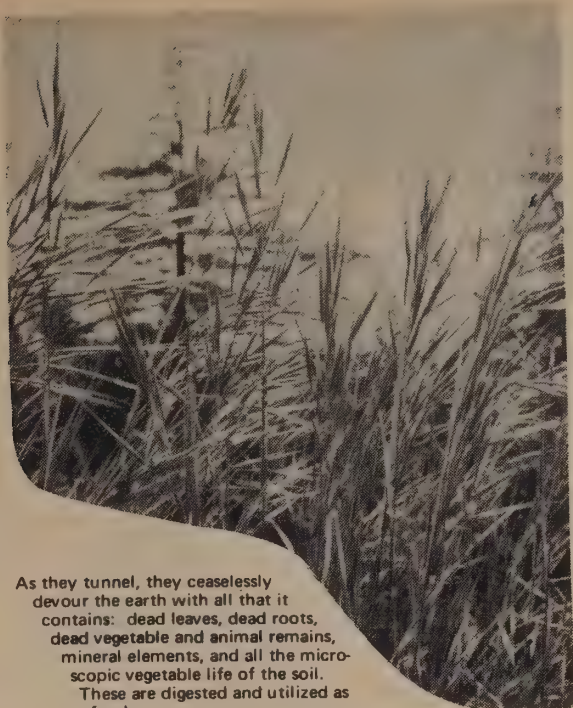
The earthworms' work of enriching the soil continues day and night, summer, winter, spring and fall, even under frozen earth, as deep as 14 feet!

The earthworm has 10 hearts. It is bi-sexual, cross-fertilizing. It lays its eggs in sacs underground. It has no eyes, but it can sense light. It avoids light and cold by burrowing. All 1,800 species in the world's temperate and torrid zones are nocturnal and subterranean in their habits. The life expectancy of a Hybrid Red Wiggler is 15 years.

Earthworms ordinarily come to the surface only at night in order to forage for food and to throw off their soil-enriching castings. They forage for organic litter. Earthworms never eat anything that is living.

Worms are seen above ground in daylight only under unusual conditions. Sonic booms, poisonous chemicals, and heavy rains will all bring them to the surface. (Excessive rains flood their burrows and send them scurrying to the surface to avoid drowning.)

The tireless earthworms never sleep. They never cease burrowing; riddling and honeycombing even the most dense clay and compact adobe soils.



As they tunnel, they ceaselessly devour the earth with all that it contains: dead leaves, dead roots, dead vegetable and animal remains, mineral elements, and all the microscopic vegetable life of the soil. These are digested and utilized as food.

At night the earthworms come to the surface to eliminate all this in the form of castings. They excrete practical neutral humus—top soil so rich in water-soluble nutrients vital to plant life.

Their castings, from the deep layers of the earth, are not just sterile, mineralized earth. Everything eaten and digested is ground and thoroughly mixed and takes on a new form. When deposited at night on the surface of the earth, this new material has become humus-laden topsoil, ready for immediate use by growing vegetation.

Whether the soil is acid or alkaline, the worm castings are always more neutral than the parent soil. The castings always have a lower clay content, are richer in organic matter, nitrates, total and exchangeable potassium and magnesium, available phosphorus, base capacity, base saturation and moisture equilibrium.

The castings are a natural compost and fertilizer. Dead vegetable matter is not only transformed into useable forms through the castings, but is mixed with inorganic matter to make both of greater use.

Without earthworms, no soil can be truly fertile for long. The presence of the earthworms not only spurs and speeds plant growth, but allows seeds to grow more rapidly. Earthworms draw the seeds into their burrows. This enables the seeds to germinate under proper conditions of darkness and humidity.

The ceaseless burrowing aids in aeration and drainage of the soil. Plant roots are enabled to enter the soil easily. Plant life becomes harder and can live through drought conditions more readily. Rain trickles into the worm burrows instead of running off the surface. The water is retained and erosion prevented. Roots are provided with vital oxygen and a dynamic organic fertilizer. Deeper burrowing brings up inorganic ions, change particles, from deep layers to root level.

Earthworms add one inch of topsoil every 10 years. No soil is fertile because of its composition alone, but because earthworms are working throughout, keeping the soil fertilized, stirred up and well aerated.

The world's tastiest worms must be found in New Zealand. The Maoris there once considered well-prepared and well-cooked worms a great delicacy. The chiefs reserved the prime specimens.

The world's longest earthworms are found in Australia and India. Two genera of giant worms there reach 12 feet in length. They can be located as they move underground by the gurgling sounds they make.

Equatorial South American Indians once worshipped a 7-foot-long genus of earthworm, the *Rhinodrilus*, recognizing its part in fertilizing the soil.

Ritual

A few weeks ago the local chapter of Ecology Action asked me to give a class in backyard composting. Since at least half of our intention was to organize a group of people who might be willing to serve as neighborhood instructors in composting, I hoped that my class might function as something of a model that other organizers could draw ideas from. Considering that the form of the class was as important as any content it might have, I was careful to introduce as many ritualistic elements into the occasion as I could think of, hoping that the event itself might be what it was about.

We began with tea. Twenty two people, many of them strangers, in a room, on cushions, quietly drinking tea before anyone had said an official word.

After some discussion of composting, the ritual continued outside. In the process of talking about composting, I sprinkled the tea leaves we had used on my compost pile. From the pile each person took a cup of half-done compost, plus two worms, as seed for the piles they would begin at home.

The class then settled into a business meeting, with all the usual fragmented talk that goes into group decision-making. But it was good to think of our little spiritual exercise underlying the politics of the occasion. Whatever debates, fights, hassles and pure noise might subsequently come up, we'd at least begun in silence. Silence was as much a seed among us as our cups of compost. Above all, our separate compost piles were cousins now. May the tribe increase!

Shit

tommy laing said you can shit in your nest just so long, then you're nesting in your shit. my dad said people in china save every little bit of shit they can, and work it back through the cycles. i'd like to suggest that humans use up more shit than they put back into the shit chain.

a hundred years ago migrating birds used little islands as roadstops. they had quite a little pile saved up, 200, 400 feet deep, until some boatowners started hauling birdshit fertilizers back to the continents, opened up mines, called them the guano islands, and scared off most of the birds. then the bats got their caves robbed.

a year or so ago the western horseman ran an ad from a fellow somewhere in illinois who was retailing conversation-piece bottles of horseshit under the name of "uncle charlie's stallion manure." maybe in pint mason jars. corncobs make better silage than fourpury toiletpaper does.

if you live in the city and are into regularity and laxatives and BM pay toilets, then you pay your dime and a couple of gallons of water flushes your shit down with the sanitation chemicals so some fellow down the line can either mix his sewer sludge with rice husks and sell your shit back to you for your banzai bushes, or haul the mess out to sea and create big dead spots in the ocean. indirect taxation. scatology.

stools as tools, ed says.

J. D. Smith

Dead Drunk Slugs

In the February 9, 1970 issue of *Time* on page 46 is a short article on "Dead Drunk Slugs". Entomologist Floyd F. Smith found that beer, fresh or otherwise, attracted and killed 300 slugs compared with 28 slugs for a metaldehyde/arsenic mixture. The small amounts of alcohol used in such traps as "poison" would not harm small children or pets who sometimes find and eat poison bait. This new "poison" is easy to get and safe to handle. Of course, some bird might get drunk by eating an insect killed in a trap of this type but I think that is much better than dying slowly from DDT. This new "poison" can be used for almost anything. I can remember my Grandfather telling of how he got rid of unwanted pigeons by feeding them rum soaked cracked corn and dropping the drunk birds off on the other side of town.

Yours Truly,
David Smith
Mendham, N. J.

If anybody on the Sacramento-Los Angeles Survival Walk is keeping an interesting diary, maybe we could print parts of it in the next \$1 Catalog.

Underground, Overground

The conservation scene is getting weird in a lot of ways. Lot of ferment out there. And no little confusion. The scene is divided into at least two elements, underground and overground. Overground is conventional, traditional, shall we say "conservative" conservationists? Underground is far-out, tending to radical. But how do these elements themselves divide? It might be worthwhile to hold up a mirror to our own nature and draw a Conservation Family Tree. Out of Sierra Club, by Friends of the Earth, behold: what? Too early to tell, probably. But there are clues. The most interesting area in conservation is that delicate point where underground and overground meet. Now there's a junction worth hanging around the service station at. Freaks come from the left, carrying hand grenades. But they tend to blow themselves up, as well as the service station. Ladies and gentlemen come from the right, carrying tea and cookies. But they tend to bore themselves to death. But here comes more freaks from the left, and what they're carrying is beautiful ideas. And here comes more ladies and gentlemen from the right, carrying lots of money. And what they do at the junction is flat out get married, and split in all directions, planting trees on the honeymoon. The 1970's will be an interesting decade.

"Every country is accessible to a wise man,
and a good soul's fatherland is
the whole earth."

(Democritus of Abdera)

Some friends & I were out in the woods near Big Basin the other day and we started picking up the garbage till we had a trunkful and we thought what a great idea it would be if instead of painting eggs at Easter most of which go to waste anyway if every youngster or oldster or whatever were to go to the wildwoods if they can find any and hunt for beer cans instead of Easter eggs this coming Easter. Like some of these old rituals can be converted to more useful purpose: on Halloween once I remember collecting pennies for the U.N. or some worthy cause instead of candy, it would be the same thing and who knows the whole earth might come clean if you made a game of it.

Some of these cans have been there for more years than I have, and it is exciting to find them and to throw them in a bag and see what the woods look like without them.

I don't even know when Easter is, but it's coming up.

I figured you'd be the one to publicize the idea if anyone could. (And for that matter why couldn't the state (The State) pay a few hundred people who really dig tramping the woods say \$20 a day plus expenses to go around picking up trash? That would be a vocation one could be proud of.

If you need more ideas or a man to work at any wholesome job,

I remain,
yrs

Walter Martin
c/o 1650 Waverly
Palo Alto, CA

Getting to Know You

Most suburbanites are in such resistance to being where they are that they deny themselves the possibility of really coming to know it. It is assumed that "the land" the suburban community is built on is the exclusive domain of people like plumbers, city engineers and building inspectors, and that the only thing the resident has a right to know is the insides of his house. But the sun shines and the rain falls on suburbia just like every other place. Ecology is as much a reality there as it is in the high Sierras, and just as fascinating for the attentive student.

How much do you know about the water table in your suburban community? How does the soil in your back yard test? Here are some ideas on ways to answer those questions.

BACKYARD EXPLORING

How much of the water which has fallen during the recent rains stays behind in the soil and where around your house can you find out?

Get a spade and dig down deep to see where water has soaked the deepest. Try different places: in your garden or lawn, in the woods where there is a good cover of leaves, along a creek, in a hard-worn horse corral, on a steep slope, in the bottom of a gully, in a dirt road. Measure where water has penetrated deepest and write down what you discovered.

Testing Soils

Bring samples of your different soils into the house—at least three—and label each to show where it came from. Compare the size of the particles and the composition. This has much to do with how easily water moves through a soil and how much water it will hold.

Get three quart jars. Fill each 2/3 full of water. Pour a sample of soil into each, one per jar, until the jar is almost full. Tighten the cover and shake vigorously. Then put the jars on a table and let the soil settle. Allow plenty of time, maybe overnight. Which soil settles out first? What is the nature of the soil particles in the soil that had the greatest depth of rain penetration? the least? Some of the finest particles may not settle out at all.

Try to get samples of the soil at different depths in your jars. Use a straw. Do your different layers have different feels when you rub them between your fingers? Gritty (sand), velvety (silt), smooth (clay) Sand particles are usually large—.08 to .002 inches in diameter; silt, .002 to .0001 inches; clay, less than .0001. Can you roughly estimate how much sand, silt and clay your soils contain? Which soil composition was best for holding water on the land?

Air in soil is just as important for storing water as composition. Water penetrates soil by following the air spaces. To find out which of your soils have the most air in them, fill a quart jar half full with one kind of soil. Then add water to fill the jar. Note the air bubbles. Compare your soils. Which have most air? Maybe all the air spaces in your soil samples are filled with water. Dry your samples in the oven and then repeat the experiment.

Value of Water

When water soaks into the soil it is held back in its rush to the sea. It may stay in the soil and it may seep through it gradually and follow underground rocks and cracks downhill. Or it may reach a tough strata under the ground where it settles, forming our underground water supply. We need to keep our soils and water right where they are, not rushing to the sea. How much silt is running off your hills and fields? Take a bucket of water out of your nearest stream or drainage ditch the next time it rains. Let it settle and find out.

Perhaps you would like to try to keep the water and soil on your land by slowing down its flow. There are many ways: diversion ditches, small dams, planting of ground cover, bushes, and trees, gully repairs and improving the quality of the soil. Proper care of soil and water could save your community a lot of drainage problems.

Olive Mayer

from *The Black Mountain Gazette*
Sierra Club
Peninsula Regional Group
Vol. IV, No. 1

FROM THE EDITOR . . .

Almost in the time since the first edition of *Muir and Friends*, ecology has become topic number one in the media and in private conversations. This interest came just in time: last week, conservation groups, including FOE and with Sierra Club leadership brilliant, banded together to defeat the National Timber Supply Act that threatened to destroy all remaining opportunities to designate wilderness in the National Forests. A year ago that legislation might have breezed through the Congress virtually unchallenged. Not now. Foreclosing on wilderness was no way to begin the Decade of Environmental Concern, and the public let the Congress know. Full-scale industry support and an Administration blessing were fortunately overcome—probably for the rest of this session of Congress.

Ian Ballantine, with whom we are publishing paperbacks, points out, however, that "The banalization of the decade of ecological concern is already in progress. Many industrialists, advertising agency people, and media people are expecting or hoping that the concern will pass quietly. Wrongheaded recommendations could hurt the cause. There is need to concentrate on specific things—on the kinds of behavior and on the kinds of products that are considerate of the environment."

from: *Muir and Friends*, published at intervals by Friends of the Earth and John Muir Institute, 451 Pacific, San Francisco, California 94133; or 30 East 42nd Street, New York, N. Y. 10017.

Neighborhoods, Arise!

The thing people are starting to recognize about garbage is that it's valuable. Old newspapers are worth about \$8.00 a ton to some salvage dealers. Glass, aluminum cans and tin cans are also worth money. Ecology Action in Palo Alto, California, is now organizing the Whole Earth Salvaging Company. This excerpt from their handbill, plus the description of the "Lifehouse" concept, should help groups in other communities begin similar programs.

Whole Earth Salvaging Co.

1. Get a group of households together in your neighborhood who want to help make the WHOLE EARTH SALVAGING CO. work.
2. Organize a neighborhood pick-up point (a garage, nearby vacant lot, etc.) (1 pick-up point for each group of 7 or 8 households).
3. Arrange to pick up or have the "re-cyclable resources" taken to the pick-up point. (Each person should separate out glass, aluminum cans, tin cans, and newspapers.)
4. On specified dates (We start out Saturday, March 28th), take the segregated items to central storage points (Storage points now being located). If you know of any—an unused shed, garage or lot—let us know at Ecology Action.

ZGP—Zero Garbage Production—

from: Ecology Action, 162 University Ave., Palo Alto, CA 94301

Some Ideas on the "Lifehouse" Concept

The lifehouse is a neighborhood community center, set up in your own home, where help and information on the starting and running of food co-ops, gardens, compost heaps, recycling of garbage, and planting of sidewalk trees (among many other related things) can be found. This includes information on pesticides and pollution of air and water, plus what can be done to fight them. Eventually, the lifehouse concept will, hopefully, result in the "community of San Francisco" being run by its citizens on an ecologically sound basis.

Every lifehouse won't be able to do all of the above things immediately, but just starting simply with, say, getting everybody together to plant trees on your block (the city will break the sidewalk, and you must supply the trees), and knowing the procedure for filing a nuisance petition with the BAAPCD (Bay Area Air Pollution Control District) on a smoggy day, would be a good start.

Other houses might start with setting up a recycling plant. That is to say, a garage or basement where newspapers, corrugated cardboard, aluminum cans and rags can be stored and returned to dealers who will re-use them.

You don't have to turn your living room into an office, but just have a place where information can be kept (perhaps a small library) and occasional meetings can be held. The will to do something about your own survival is the most important thing. The lifehouses will provide an opportunity for all of us to be involved in exercising our will to survive.

from: ecology action, 1370 Masonic, San Francisco, CA 94118

Heat Circulating Fireplace

The fireplace item is one of 5 final chapters that I am adding to my book. I reprint & distribute to all my book owners. This fireplace material represents YEARS of thought and experimentation on the subject of wood heat. I would be happy to see it widely read.

Ken Kern
Oakhurst, CA

For the past dozen years I have participated directly as architect and mason in the design and construction problems of an extremely efficient, good-looking, highly functional, and inexpensive fireplace for Sierra-foothill living conditions. Chapter 9, volume one of my book, *The Owner Built Home*, was written before I had sufficient opportunity to delve into the many ramifications of fireplace construction—theory and practice. In this supplement to Chapter 9 I intend to review the principles of good fireplace design, and add some new, important information on the science of combustion and heat-exchange. I will also tell how an owner-builder can build an improved fireplace for a fraction the cost of conventional, less efficient types.

Before one can design a satisfactory fireplace he must understand the process of fireplace combustion. When smoke and soot are observed coming out of a chimney, you can be certain that combustion is incomplete. What you actually see are small quantities of hydrocarbons and free carbon (soot) that are not burned. Thus, much of the heating capacity of the wood-fuel is lost. The heat loss is twofold: in the hot gases that escape up the flue; and in the unburned combustible particles. The first principle of fireplace design, then, is to aim at complete combustion.

Air-intake control is the key to efficient fireplace combustion. The ignition of a correctly proportioned gas-air mixture will give a complete combustion of the wood and emit gases containing only the non-combustible carbon dioxide, water vapor, oxygen, and nitrogen.

Wood has a very high oxygen content, so it naturally requires a very small amount of air for combustion. This explains why wet (green) wood has less heating efficiency than well-dried wood. The point of combustion of wet wood can be lowered only by increasing the excess draft. A high moisture content (freshly felled wood contains 50% water) interferes with the combustion process. Evaporating water forms around the wood like a sheath of vapor and blocks the entry of oxygen, thereby lowering ignition and combustion rates. If you must burn wet wood you will need plenty of draft. But for proper dry wood the draft must be controlled. This will now be explained.

A fire in a fireplace involves: (1) the motion of air toward the fire; (2) its passage through and over the fuel-bed; (3) its admixture with combustion products; and finally, the flow of the mixture up the flue.

(1) the required air-volume-flow toward the fire for the average fireplace-opening is about 3000 cubic feet per hour—which amounts to about four complete air-changes per hour in an average size living room. Now, the amount of fresh air required for proper ventilating by a family of four has been established at about 1400 cubic feet per hour. Thus, a standard fireplace will cause the displacement of over twice the amount of room-air required for optimum ventilation. Hence half the amount of air needed for the fire should be drawn directly from outside the room, and not be permitted to pass through the room to the fireplace.

This is even more needed where fireplaces are installed in our modern, tightly-constructed, efficiently weather-stripped houses: the amount of air available for supplying the chimney draft is insufficient! A partial vacuum results, which tends to pull smoke and combustion gases back into the room.

Moreover, lack of draft from outside the room causes foot-chilling drafts inside. A sub-floor inlet for pre-heated new air will minimize the cold air currents within the room. Combustion efficiency is also increased, since the incoming draft consists of pre-heated air. This is best achieved by providing a secondary air supply duct, which passes under the firebed with exit at the grate.

On the subject of foot-chilling drafts, an owner-builder should certainly consider the many advantages of a sunken hearth. The 12-inch high raised hearth commonly built nowadays puts the heat radiation level just that much higher off the floor. A 12-inch sunken hearth puts the heat radiation at floor level—where it is most needed. There are other advantages to a sunken hearth: the hearth makes a neat seating alcove; a higher flue is achieved; there is less danger of flying sparks as the trajectory of a spark is considerably less distant than from a raised level.

(2) A properly designed grate is critical to the second consideration—the passage of air through and over the fuel-bed. A grate is used to raise the firebed a few inches above the hearth. It should be relatively small, as it is important that the wood charcoal which forms during combustion cover the grate completely. If the grate is too big, so that too much wood is burned, the temperature of the gases escaping through the flue will be too high, which will entail heavy losses in heat. On the other hand too small a grate causes draft trouble and consequent incomplete combustion with the added risk of tar deposits in the chimney.

(3) We come, thirdly, to the admixture of ventilating currents with combustion products. The inside fireplace proportions are very important here. Deep fuel-beds (long from front to back) produce more smoke than shallow beds, since there is scant combustion-air at the back of the grate. Experience proves that the rate of smoke emission increases proportionally with the depth of the firebox, especially in the early stages of firing. It is also apparent that radiation is more effective with a shallow grate; with a deep grate radiation is mostly upward. An inclined fireback, sloping forward as it goes up, also contributes to increased radiation.

The throat-opening should be sufficiently small to constrain the effluent to pass at a speed high enough to discourage down-drafts. If the chimney throat is too large, then some cool air that does not affect ignition or combustion will be drawn over the fire. This naturally results in an increase of smoke-emission.

(4) The final aspect of a fireplace, the flow of gases up the flue, involves the chimney itself. A chimney performs a dual function: production of drafts; and elimination of combustional residues. The chimney should be designed so that the draft is adequate to deliver just enough air for complete combustion within the fire-box. Flue size should be minimal, and the flue should be well insulated so that its temperature at the top is not much lower than at the bottom.

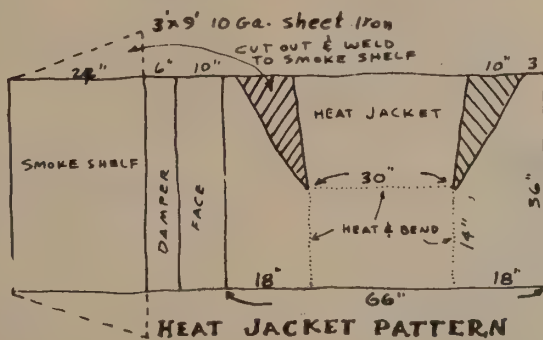
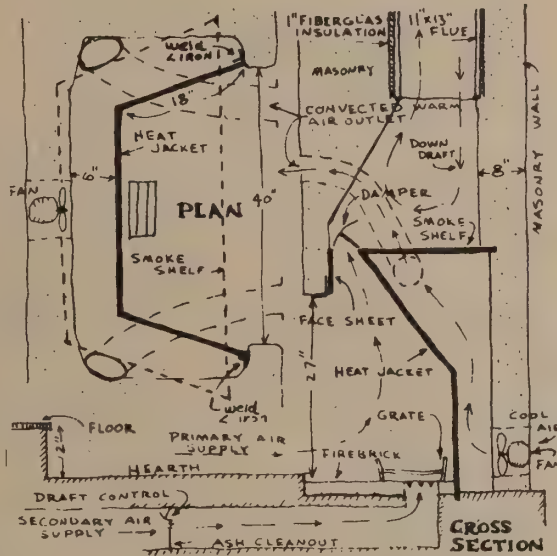
Insulation material between the flue-lining and surrounding masonry construction improves draft. Masonry itself is very poor insulation ordinarily.

For efficiency, the fireplace should be located on an inside wall of the house. An outside chimney, exposed to the weather on one or more sides is bound to cool off when the fire is low. Then when the fire is kindled again, the products of combustion have to force their way out of a chimney filled with dense, cold gases. Moreover, the heat that does escape from an inside chimney is useful because it helps to warm the house.

To sum up: Part of the air moving toward the fire should come from outside the room. There should be a grate. The grate should be small, the fuel-bed shallow, the throat and flue narrow, and the flue insulated. A round flue is best.

OWNER BUILT DESIGN

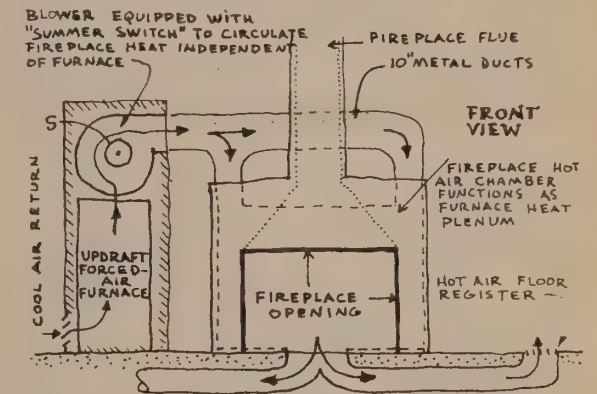
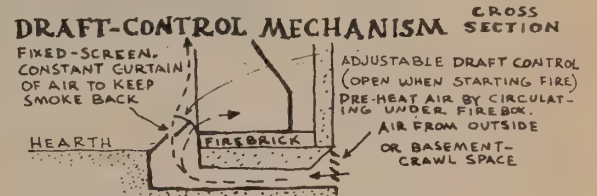
Sheet iron is 12-times as conductive as stone masonry. A metal-jacketed heat chamber will therefore emit quantities of conductive heat that would be otherwise lost through absorption in the masonry or lost to the atmosphere via the chimney. Patented metal fireplace units can be bought for about \$80. A comparable, but simpler and easy-to-build unit can be fabricated in the home-workshop for about \$10 worth of materials. The fireplace unit design that I am presenting below is the result of improvement made over a number of years. It represents the best in fireplace research thinking, and is designed to give maximum heating efficiency. It really works!



The metal chamber itself is cut, bent, and welded out of a single 3-foot by 9-foot piece of sheet iron. A damper is welded to a pair of hinges which is in turn welded to the smoke shelf. A cool-air supply-duct should be provided at the front lower sides or rear lower back of the fireplace; the warm-air outlet is best provided along the upper front of the fireplace. Outlet ducts can also be placed in adjacent rooms when a forced air circulation fan system is employed to distribute the hot air. The heat from a single fireplace can very well be used to heat other rooms in the house. Ducts may be provided in the floor slab, or in the attic space, for a forced-air fan-system to distribute the heat through controlled outlet grills.

A neat arrangement, if the fireplace is not the only source of heat, is to incorporate the regular forced-air heating system with the fireplace unit. In this instance, the fireplace hot-air jacket-chamber acts as a plenum, and furnace heat is distributed through the fireplace unit. A separate fan-control switch is provided so that the furnace blower can be used to distribute fireplace heat without the furnace proper. The fireplace can be used separately; the furnace can be used separately; or both units can operate simultaneously.

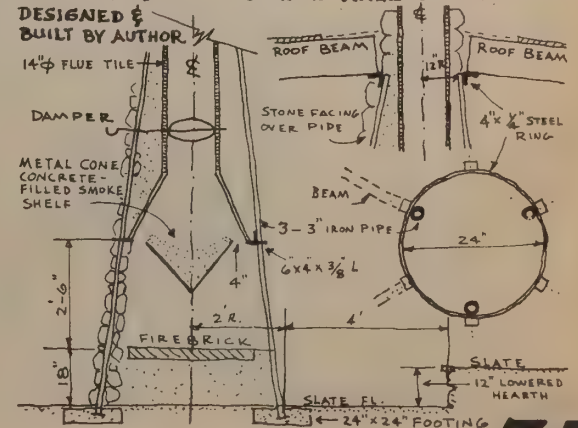
If an owner-builder really expects to take his fireplace heating system seriously—and desires more than room "atmosphere" from wood-heat—then he should consider the above design features.



FURNACE-FIREPLACE HEAT COMBINATION



WOOLMAN SCHOOL SOCIAL-HALL FIREPLACE



GROWHOLE BASICS

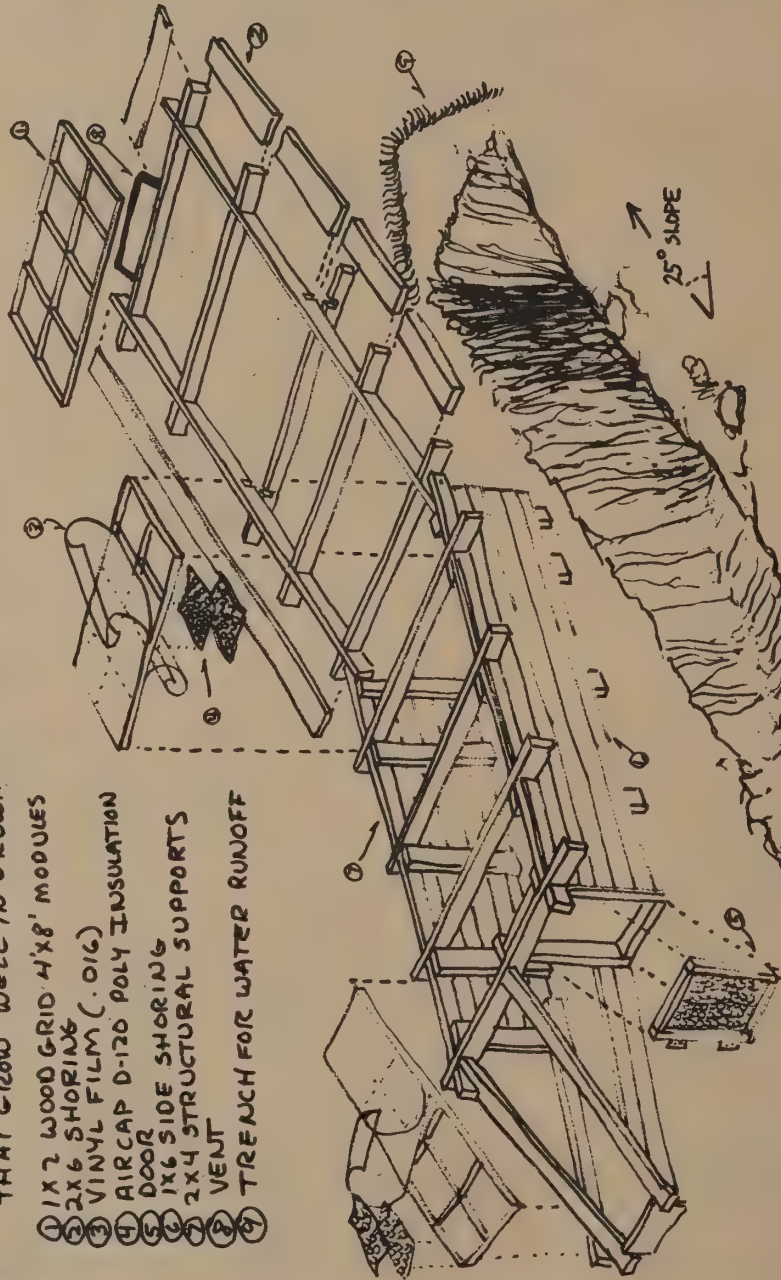


EXTERIOR UNDER CONSTRUCTION

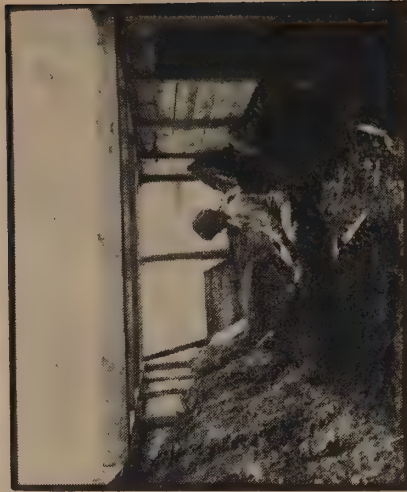
1 THE SUN IS A SOURCE OF FREE ENERGY **2** THE EARTH STORES HEAT
THESE TWO FACTS MAKE IT POSSIBLE TO GROW VEGETABLES/FRUIT IN WINTER

DIG A HOLE THAT FACES SOUTH TO CATCH AS MUCH SUNLITE AS POSSIBLE. COVER IT W/ MEMBRANE THAT LETS LITE IN AND WONT LET HEAT OUT. WET DIRT WALLS/FLOOR OF HOLE STORE ENUF HEAT TO KEEP WARMTHRU NITE. THE HRS. OF DAYLITE & TEMP. INSIDE GROWHOLE MIMIC SO. CAL. VALLEY. PLANTS THAT GROW WELL IN GROWHOLE ARE SO. CAL. VALLEY WINTER CROPS.

- 1 1x2 WOOD GRID 4'x8' MODULES
- 2 2x6 SHORING
- 3 VINYL FILM (.016)
- 4 AIRCAP D-120 POLY INSULATION
- 5 DOOR
- 6 1x6 SIDE SHORING
- 7 2x4 STRUCTURAL SUPPORTS
- 8 VENT
- 9 TRENCH FOR WATER RUNOFF



EXTERIOR FINISHED STATE



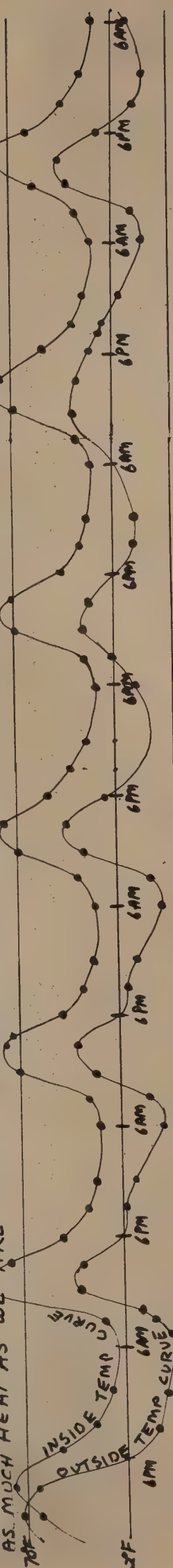
INTERIOR DURING 1ST PLANTING



INTERIOR CHECK SHORING -

HEAT ECONOMY

THE SUN RADIATES ABOUT 200 B.T.U. PER SQ FT. OF EARTH'S SURFACE PER HR. ON A CLEAR DAY. ABOUT HALF OF THIS HEAT IS ACTUALLY COLLECTED BY THE GROW WHOLE. A WINTER'S DAY IS ABOUT 8 HRS. LONG & THE AREA OF THE MEMBRANE IS ABOUT 300 SQ. FT. WHEN ALL OF THESE NUMBERS ARE COMBINED, WE FIND THAT 250,000 B.T.U. ARE COLLECTED ON A CLEAR WINTER'S DAY. THE MEMBRANE IS 2 LAYERS OF VINYL (0.16) & 3 LAYERS AIRCAP D-120 - EACH LAYER OF AIRCAP IS TWO FILMS SO WE HAVE A TOTAL OF 6 FILMS. ONE FILM TRANSMITS 3 B.T.U. PER SQ FT. PER HR. PER DEGREE FARENHEIT, TEMP. DIFFERENCE BETW. INSIDE & OUTSIDE. 6 FILMS WILL CONDUCT 6 AS MUCH HEAT AS ONE FILM. THE INSIDE TEMP. IS 50°F & THE OUTSIDE TEMP. IS 20°F. & THE NITE IS 16 HRS. LONG. THUS 60,000 B.T.U. ARE LOST THRU THE MEMBRANE DURING THE NITE. THUS WE COLLECT 3X AS MUCH HEAT AS WE ARE USING. EVERYTHING IS OK. PLANTS ARE GROWING AS OF 2-2P.70 AT 9000° ABOVE SEA LEVEL AT LAMA.



GRAPH OF TEMP DIFFERENTIAL - INSIDE & OUTSIDE FEB.

\$ ECONOMY

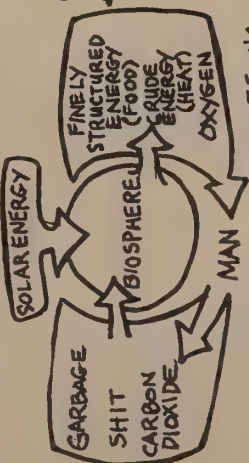
MACHINETIME (BACKHOE) @ 8 PER HR. TOT. \$10 / VINYL @ .07 PER SQ FT. TOT. \$42 / BUBBLE CAP @ .05 PER SQ FT. TOT. \$30 / LUMBER @ .08 1/2 PER SQ FT. \$25 // TOTAL \$97.02 .30 SQ FT

PROBLEMS

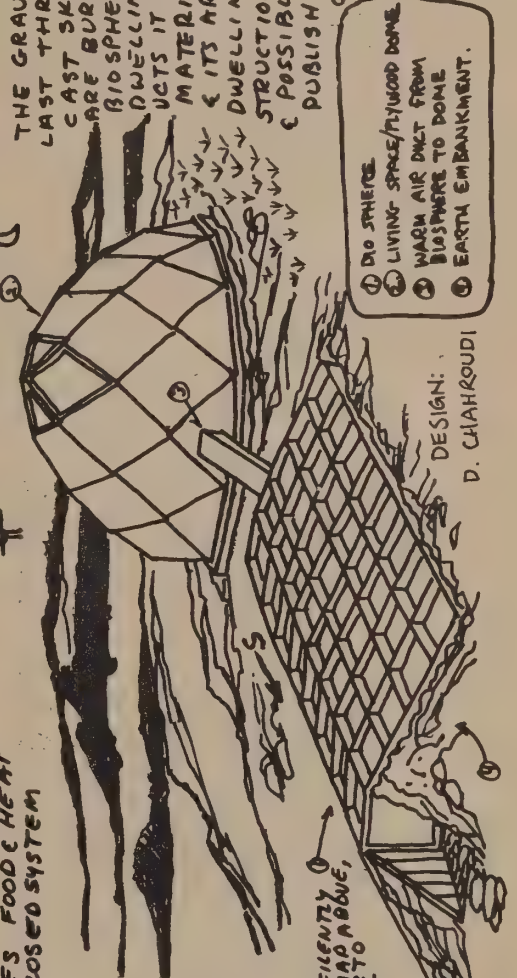
LIFETIME OF THIS CONFIGURATION OF PLASTICS UNKNOWN / EACH LAYER OF AIRCAP MUST BEYOND / DEW FORMED ON TOP VINYL LAYER BLOCKS LITE. IF BOTTOM LAYER OF AIRCAP WD. GIVE BETTER INSULATION & PROBABLY WD. NOT REDUCE LITE SIGNIFICANTLY / DEW FORMED ON TOP VINYL LAYER BLOCKS LITE. IF BOTTOM LAYER WAS AIRTITE THIS WD. BE RECTIFIED / DIFFICULT TO DIE HOLES IN SOME AREAS / PLANTS MUST BE HAND POLLINATED DUE TO ABSENCE OF WIND IN GROWHOLE!

COMING: ~~US~~ BIOSPHERES SOON!

THE BIOSPHERE IS A SYSTEM WHICH PROVIDES FOOD & HEAT FOR A HOME. IT IS (W)DWELLING (PEOPLE) A CLOSED SYSTEM



IT REQUIRES NO FUEL, NO SOIL & CONSUMES NO WATER BEYOND INITIAL INPUT. IT CAN OPERATE EFFICIENTLY ALL YEAR ROUND WITHIN GEOGRAPHIC CONFINES IN MARIANO, EVEN USED IN GROWHOLE, BUT EXTENDS BELOW THE BIOSPHERE TO COMPLETELY ENCLOSE IT. IT IS SUPPORTED BY A PLYWOOD FRAME. THE PLANTS ARE GROWN HYDROPONICALLY IN ONE FOOT OF GRAVEL & WATER. FROM NEW SCIENTIST: YOU GET TRUE GREENHOUSE EFFECT W/ PLASTIC. THE DEW ON PLASTIC BLOCK INFRARED RADIATION.



THE GRAVEL AND WATER ALSO STORE ENUP HEAT. TO LAST THRU A WEEK OF BELOW FREEZING TEMPS & OVERCAST SKIES. THE WASTE PRODUCTS OF THE DWELLING ARE BURNED & COMPOSTED & THEN FED TO PLANTS IN THE BIOSPHERE. SINCE NO FUELS ARE USED TO HEAT BIOSPHERE / DWELLING & SINCE IT CONSUMES ITS OWN WASTE PRODUCTS IT DOES NOT POLLUTE ENVIRONMENT. THE COST OF MATERIALS IS ABOUT \$1.25 PER SQ FT FOR BIOSPHERE & ITS AREA SHOULD BE ABOUT 1/2 FLOOR SPACE OF THE DWELLING. TWO BIOSPHERES ARE PLANNED FOR CONSTRUCTION SUMMER/AUTUMN OF 1970 AT LAMA FOUNDATION & POSSIBLY SOME MORE UNITS AT LILA, N.M. WE WILL PUBLISH DATA AS SOON AS IT IS AVAILABLE. QUESTIONS OR CONSULTATIONS: S. BAER OR D. CHAHROUDI C/O ZOME WORKS, P.O. BOX 712, ALBANY, NEW YORK 12203

PREPARED AT LAMA FOUNDATION - MARCH 1, 1970
 REPRINTS AVAILABLE @ .25 FROM:
 LAMA COOK BOOK FUND / BOX 422 / CORRALES N.M. 87103

Cheese, Yogurt, & Beer

On page 13 of your last Supplement there is a request for information about making cheese without special equipment. As I have never seen this subject reviewed in your Catalog I am enclosing the accompanying material. I was informed by the Department of Food Science and Technology, University of California, Davis, several years ago that there are no full length books on cheese making for the home-maker. Thus, I think it is important for people to know about these pamphlets and about sections in books. Monographs on cheese making which are intended for the dairy industry are highly technical, make enormous quantities and require expensive equipment due to the concern with precise quality control. In answer to the queries on page 13 of the supplement I have spelled out the various kinds of incubators you can improvise for keeping yogurt insulated at steady temperatures, in communes, wilds & kitchens.

CORRECTION: See page 12 of Supplement (3rd paragraph of 3rd column.) R.H. Shumway Seedsmen do carry herb seeds. See page 21 of their catalogue where they offer at least 20 different herb seeds, usually at 35¢, 30¢ or 25¢ a packet and with special bulk prices—everything from wormwood, sorrel, balm, horehound to thyme, marjoram etc.

Note. See Supplement p. 13 bottom right corner. The Tilke book costs about \$18 if ordered from Blackwells but \$29.00 if ordered from American outlets

CHEESE, YOGURT AND OTHER CULTURED MILK PRODUCTS: HOW TO MAKE THEM YOURSELF.

Walter, H.E. *An American-Type Cheese: How to make it for home use*, Farmers' Bulletin No. 2075, U.S. Department of Agriculture (Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402), 1962. Price 10¢, 9 pages.

This booklet tells you in detail exactly what to do to make an American type cheese similar to Cheddar. This type of cheese is called "granular or stirred-curd cheese." You can use either raw or pasteurized milk. No special equipment is required and you can make several implements yourself quite easily by following their instructions. They tell you how to make a cheese hoop out of any one-gallon tinned container with straight sides.

Phillips, Clement A. "Making Cheese at Home," ONE—SHEET ANSWERS No. 90, 1963, Free. (Department of Food Science and Technology, Agricultural Extension Service, University of California, 209 Roadhouse Hall, Davis, California)

This page tells you how to make cottage cheese using a culture rather than rennet, and neufchatel cheese which is a soft, whole-milk cheese. The neufchatel cheese is made with rennet which is known by the trade name "Junke."

"Newer Knowledge of Cheese" (Dairy Council of California, 3900 West 3rd St., Los Angeles, California 90005) 48 pages, Free

"Cheese Varieties and Descriptions," U. S. Dept. of Agriculture, Agriculture Handbook No. 54. (Superintendent of Documents, U. S. Government Printing Office, Washington, D.C.) Price, about 50¢

"How to Make Yogurt" from an article by L. A. Burkey, Division of Dairy Research Laboratories (BDIM-Inf-2, USDA-ARS, Bureau of Dairy Industry, Washington 25, D.C.) I got a copy of this from Department of Food Science and Technology, Agricultural Extension Service, University of California, 209 Roadhouse Hall, Davis, California. 6 pages, Free.

The instructions are very detailed and scientific technical explanations accompany each stage of the process so you will know what you are doing. They do not tell you how to make an incubator.

When you buy JUNKET Rennet Tablets there are instructions in the package which tell you how to make ice-cream and cottage cheese. They will send you other recipes for making cottage cheese with rennet tablets if you write to Salada Foods Inc., Woburn, Massachusetts. They tell you that Rennet is a natural enzyme but what they don't tell you is that rennet is the digestive juices found in the lining of the cow's stomach. In Scotland and elsewhere, cubes of cow's stomach were put in the milk to make it set. If you butcher your own animals and want to use the stomach, you will find instructions for curing the stomach and making the cheese in many nineteenth century books on cattle and dairy husbandry. The methods used in Scotland are outlined in *Chambers's Information for the People* edited by William and Robert Chambers, volume II. No. 78, pp. 433-446 (1842) in an article called "Cattle and Dairy Husbandry."

Hunter, Beatrice Trum. *The Natural Foods Cookbook*. She tells you how to make buttermilk, sour cream, clabbered milk, and milk cultured with kefir grains. She also tells you how to make cream cheese, cottage cheese, Irish Moss (carrageen) cheese and soy cheese. She provides good instructions for making your own yogurt with an electric incubator and without one.

Elwood, Cathryn. *Feel Like a Million* (Pocket Books, 1 West 39th Street, New York, New York 10018) No. 75084 Price 75¢ 1968. She has a whole chapter on Bulgarian yogurt and provides good instructions for making your own, with and without an electric incubator.

Hauser, Gayelord. *Gayelord Hauser's Treasury of Secrets* (Fawcett World Library, 67 West 44th Street, New York, N.Y. 10036) No M898/8 Price 95¢, 569 pages 1963

He tells you how to make your own buttermilk, kefir milk, cottage cheese, yogurt and French cream cheese which is the easiest thing to do. His yogurt instructions are clear. To make French cream cheese you just dump a cup of yogurt into a hanky and let it hang above your sink overnight. By morning you will have tender, creamy, low fat, high protein cheese. If you want to you can flavor it with herbs, a little Roquefort or just have it straight.

Jones, Dorothea Van Gundy. *The Soybean Cookbook* (Arc Books, 219 Park Avenue South, New York, N. Y. 10003) No. 1770, Price \$1.45 240 pages.

She has a whole chapter on making your own soy milk and other whole chapter on making your own soy cheese (tofu) and recipes for making your own soy yogurt.

Davis, Adelle. *Let's Cook it Right* (Harcourt, Brace and World Inc., 757 Third Ave., New York, N. Y. 10017) 1962, Price \$3.95, 597 pages. She has excellent instructions for making different types of yogurt all out of powdered skim milk. You can use goat's milk and you can enrich the powdered milk mixture with a can of evaporated milk.

She tells you what to do if you don't have an electric incubator. She also tells you how to make your own cottage cheese and buttermilk. She also has an excellent recipe for Pasha, an uncooked cheese cake made from cottage cheese and powdered milk.

Rombauer, Irma S. and Marion Rombauer Becker. *The Joy of Cooking* (The Bobbs-Merrill Co., Inc., 4300 West 62nd St., Indianapolis 6, Indiana) 1964, Price \$6.50 849 pages. They tell you how to make a number of unripened soft cheeses and explain the principles of cheese making. They tell you how to use raw milk. There are recipes for making cottage cheese, neufchatel cheese, rich cream cheese, buttermilk, yogurt, cultured sour cream, Devonshire or clotted cream, creme fraiche, soy bean milk, nut and coconut milks.

The instructions for making yogurt are excellent and careful instructions are given for making your own incubator out of foam rubber and plastic bags.

Hosain, Attia and Sita Pasricha. *Cooking the Indian Way* (Spring Books, Westbook House, Fulham Broadway, London, England) 1962, Price, less than one dollar. 245 pages. You may order this book from Blackwells

There are recipes for yogurt and panir, an indian cheese made of milk and lemon juice which is pressed under a weight so that it becomes flat and all the moisture is removed.

Vithaldas, Yogi and Susan Roberts. *The Yogi Cookbook* (Pyramid Books, 444 Madison Avenue, New York, New York 10022) 1968, price 75¢ No. T-1900 126 pages

Recipes are provided for yogurt and for panir. The panir recipe is similar to Gayelord Hauser's French cream cheese recipe except that instead of using yogurt you use a mixture of milk and lemon juice.

Singh, Mrs. Balbir. *Indian Cookery* (Mill and Boon Ltd., 50 Grafton Way, Fitzroy Square, London W 1) 21 shillings, 1967, 207 pages. She gives excellent instructions for making yogurt. She recommends wrapping the bowl containing the potential yogurt with a blanket as is done in England and India. Jersey milk and buffalo's milk may be used. Her recipe for panir is also excellent and she gives a careful explanation of how panir is used in Indian cooking.

Communes might be interested in a standard text book on food preservation:

Chenoweth, Walter Winfred. *Food Preservation: A textbook for student, teacher, Home-maker and home factory operator* (New York, 1930)

Each type of preservation is covered in detail with practical instructions (drying, salting, pickling, canning, jelly making, curing, smoking, etc.)

MORE BOOKS FOR THE FOOD FORAGER

Gaertner, Erika Eva. *Harvest without planting; eating and nibbling off the land* (Chalk River, Ontario, 1967) 65 pages, Price \$2.50. Write to D. F. Runge, Pembroke, Ontario.

Tobe, John Harold. *Sprouts, the elixir of life* (St Catharines, Ontario, Modern Publications, 1967) 112 pages, Price \$2.50. Write to Tobe's Seeds Ltd., St. Catharine, Ontario.

Muskie Jones's favourite dishes of the menfolk from the Canada of more than 100 years ago (Toronto, Algonquin Publications, 1965) 89 pages, Price \$1.00. Write to Camp Wild Duck, Clarkson, Ontario.

Muskie Jones is supposed to be a legendary folk hero, and these are his recipes.

Antonovich, Mrs. Katerina. *The Ukrainian costume; historical notes, practical instructions, illustrations, cross stitch designs* . . . (Winnipeg Woman's World, P. O. Box 791, Winnipeg, Manitoba) second enlarged edition 1964, Price \$1.50. This booklet is partly in Ukrainian and partly in English.

YOGURT (especially for hikers who want to make it in the wilds—just take powdered milk and a packet of dry Bulgarian yogurt culture with you. You can incubate the yogurt in a blanket, dead leaves or pine boughs)

1. Mix 1 1/2 cups powdered skim milk with a quart of water (or use proportion recommended on the powdered milk package). Then add an additional cup of powdered milk.
2. Bring milk to scalding temperature and allow to cool to about 116 degrees Fahrenheit. (The milk will lose its heat quickly so since the optimum incubating temperature is 113 degrees it is best to start the milk a few degrees higher)
3. Mix in well 1/2 cup yogurt or a package of dry yogurt starter.
4. Pour into a large bowl or into pint or quart jars.
5. Incubate at 113 degrees for 2-15 hours.
6. **Caution:** Yogurt is at its best—thick, creamy, custard like consistency, mild flavored, finely textured—if it is held at a constant temperature of 113 degrees without being jiggled. If the temperature is too high, or the yogurt is jiggled it will be coarsely textured and runny. If the temperature is too low it may not form yogurt at all or if it does, the yogurt will be very sour and runny. The longer the yogurt sits, the more acidic it becomes.

Note: Yogurt if chilled well will keep for weeks. After that just scrape off the mould that may form & continue to eat or to use in starting a fresh batch. I have found 3 week old yogurt (& older) very good for starting new batches of yogurt.

7. **Incubation:** a) First step is to make sure all your utensils are warm. Then you can improvise an incubator. b) The simplest procedure is to find a warm spot (pilot light, oven, sun) preferably free from drafts and to wrap the container of yogurt with a blanket, straw, or any other insulating material. c) Another possibility which works very well is to find a big container (pot, roasting pan, pressure cooker, canning kettle, picnic cooler—especially the styrofoam, spongy variety—) and to place your jars of yogurt mixture in it. Then pour in water which is about 116 degrees Fahrenheit (a candy or meat thermometer comes in handy but is not necessary—again, the 116 degrees is to allow for a gradual loss of heat). Cover the container and wrap with a heavy towel, blanket or something else to insulate it. The container should be placed in a warm spot such as on the pilot light or on a stove with the oven turned on low. d) For communes who want to make large quantities, it is easy to make a giant incubator. Take a large wood box and line it with thick styrofoam or a material like the stuff those spongy picnic coolers are made of (it is white, blue flecked, hard spongy stuff also used to make ice buckets because it is such a good insulator). Then fill it with water which is 116 degrees as an insulating bath for pint or quart jars of yogurt mixture. I prefer making yogurt in quart quantities or less because it tends to set more quickly and the product is tastier. Also, once you begin scooping cupfuls of yogurt out of a gallon batch, the stuff left over tends to "weep" or give off water. e) Other ingenious ideas for making a large or small scale incubator will be found in *The Joy of Cooking* where plastic bags and foam rubber are used. You can even make yogurt in a thermos.



If you are ever hunting for a special recipe or for recipes which use some special ingredient, write to *Sunset Magazine*, Lane Magazine and Book Company, Menlo Park, California 94025. They will zerox for you free of charge the recipes they have in their files. I got excellent recipes from them for bagels, pretzels, crackers, flat bread, panettoage, stollen, christopomo, limpa, tortillas, pumpernickel, Armenian peda bread, how to make your own beef jerkey, how to cure olives, how to use bean curd and much more. For bread beginners who haven't the bread for a book, invest in a five cent postcard and ask *Sunset* for their article which gives excellent detailed instructions and lots of photographs for baking a basic loaf of bread. They also sent me excellent recipes for all the different ways you can use filo dough, for making a superb couscous, for cooking with yogurt, for complete Indian meals, for making your own sausage, mousakka, and Indonesian dishes.

For making a beautiful home made vinegar write to *Blue Ribbon Malt Products, Inc.* Peoria Heights, Illinois. Also ask them for the dealer nearest you who carries their product. Then you can also use *Blue Ribbon Malt Extract* for making beer. They don't tell you how, however. So here is a tried and true recipe, for making beer which will cost you about 6¢ a quart.

Home Brew: a traditional recipe, not from a book. I wrote it up.

Simple, Cheap, Potent

- 2 tablespoons dry yeast (2 pkgs.)
- 5 pounds white sugar
- 3 lb. *Blue Ribbon Hops Flavored Malt Extract* (Light or Dark)
- 1/2 teaspoon powdered ginger
- 2 teaspoons salt
- 2 teaspoons citric acid (sour salt) [optional but recommended] buy it at a drugstore
- 8-9 gallons water (depending on desired potency. water may be increased)

Phase I. Combine Yeast with 2 tablespoons sugar and ginger and one cup warm (100°-105°F) water and let it sit about 20 minutes until it gets bubbly.

Phase II. In a plastic garbage can or clay crock (be sure to use a non-metallic container) put the malt extract, the sugar and about a gallon of boiling water. Stir well till the sugar is dissolved & everything is well blended. Add the salt & citric acid. Add 9-11 gallons of water so that the resulting temperature is about 100°-110°F. Then add the yeast mixture and mix well.

Phase III. Cover the crock or plastic can well. Use a sheet of plastic or several sheets of Saran Wrap and tie the plastic onto the can with string or even better, elastics. You want to keep the air out. After about 20 hours the gas will build up. Release it without letting in air. Let sit in a warm place at a relatively constant temperature of about 70-80°F. away from drafts & not on a chilly floor for about 5-7 days until the yeast has ceased to work. The foam on the top will all disappear & there will be no bubbling or gas in the beer. (Beer should be flat)

Phase IV. To bottle, sterilize quart beer bottles or pop bottles or wine bottles or use big gallon jugs (for a party). Use an enema tube (preferably new) to siphon off the beer. Avoid disturbing the yeast sediment on the bottom (it is reusable). For fizzy foamy sparkly beer add 1 teaspoon of sugar to each quart bottle. Cap with a bottle capper. Less good is a screw top or for draught beer use a cork (not so good). If desperate, drink immediately. If discriminating, let sit 4-14 days.

After you bottle the beer, the yeast sediment left in the bottom of the crock can be used to start the next batch of beer. It can also be used to bake delicious bread, so never throw it away.

The great advantage of this recipe is that all the ingredients & equipment can be bought at a local grocery, drugstore or hardware or else easily improvised. This recipe is also extremely simple & very cheap.

Barbara Kirschenblatt-Gimblett
Bloomington, Indiana

Biorythms & Reality, with Zest

Some questions. who has done anything on biorythms? Anything substantial published about it? There *should* be something in print about biorythms, worthy of entry in the Catalog.

In *Explorations in Communication*, by E. Carpenter & HM McLuhan (the H.M. stands for His Majesty) there was a helluva piece called "Lineal and Non-Lineal Codifications of Reality". Offhand, do you know of anything more detailed along these lines? [No pun intended!] Maybe some Norbert Wiener-person in the audience has a lead.

Lastly, is this what the Supplements are intended to do/be? I mean, the information supermarket, to which people address questions in hopes someone with access to relevant information will respond? [Yep]

Finally, how is Pøter Sessions' Bead Game going? As a digger in Hermann Hesse's mindyard I'm interested.

So thanx again

Louis T. Hansell, Jr.
Atlanta, Georgia

Learn Blacksmithing

Fundamentals of blacksmithing can be learned at the Turley Forge, Camino Altito, Santa Fe, New Mexico, 87501. Needed is a liking for hard physical labor and the \$300 tuition for a six week basic course (students make own arrangements for lodging and meals). Sessions limited to two students per class assure intensive instruction and plenty of personal attention.

The concentrated course covers essentials of smithing: drawing, upsetting, hot rasping, forge welding of mild steel, etc. Arrangements also may be made for concentrating upon special areas of student's interests. Instructor is Frank Turley who has served under one master iron worker and two master farriers and holds a certificate from the Oregon farrier's course.

I took Turley's course and can strongly recommend it for those with a genuine interest. Blacksmiths formerly served several years apprenticeship and obviously no one can master the trade in six weeks. However, I know of no other school of this kind and with the high quality of instruction offered, a dedicated student can learn the basics of smithing in this period. The course can benefit prospective ornamental iron workers, horseshoers, metal artists, and others.

Requests for information should be addressed to Frank Turley at the address above.

Marc Simmons
Cerrillos, NM



Cooling & Heating, the old & the new

The old people of the dry, hot, Southwest filled porous jugs with water and placed them on their window ledge; as water seeped out it evaporated cooling the temperature of the house air. The dryer, the cooler. In India they wet grass mats that they put in the windows. This is a very effective, cheap air conditioner.

Hope this knowledge can help some people. We plan on going to British Columbia where we'll get the westerlies coming from the south.

P.S.

Whole Earth, I know that: comfort is not dependent upon air temperature but rather heat loss which can be through infrared radiation. Normal heating heats the air enough to heat the walls enough to radiate heat radiation (infrared) so the walls won't absorb our radiation. Comfort can be obtained with little heat input if the walls are lined with an infrared reflector (ie. aluminum foil). But I can't find a way to use the knowledge.

On a cold Wisconsin winter night, a house insulated *only* with aluminum foil lining can be kept warm with *only* the heat from three living bodies. However, the moisture from their breath eventually condenses on the foil making it no longer reflective in infrared. I'm sure many people would be grateful if you could overcome this difficulty. (perhaps with something else easily installed for the moisture to condense on?) I leave it in your hands.

Jai Baba,
Tom



You'll Build Your Next House of Molasses

Molasses used to be an ingredient of cookies that mother made or something to put on hot cakes if you couldn't get maple syrup.

But today, if you visit our laboratory, you can hardly turn around without bumping into molasses. Beyond festoons of Spanish mesh behind our home is an entire building made of molasses. It houses the machinery for making more molasses products. To get to it, you walk along a molasses driveway that looks, feels and acts like "black top." Here and there, molasses building bricks are drying in the sun. Inside the building, you walk on a molasses floor, examine samples of hard or flexible molasses sewer pipe that rest on a laboratory table top made of molasses. There are samples of molasses plaques flexible as rubber, molasses plaques as hard as rock.

The 50-foot molasses black-top driveway you walk on would cost the average homeowner about \$50. Less if he did it himself. A five-room house built with molasses adobe brick on a molasses slab, finished with molasses stipple spray outside, troweled molasses plastic inside, would cost a man less than \$1000, exclusive of electricity and plumbing. What's more he'd have a house that would stand a hundred years or more—moistureproof, sound-proof, self-insulated, termiteproof. It's the cheapest building material in the world.

Naturally, to make these things you don't just take a barrel of pure molasses and start gumming everything up with it. Powdered molasses is the basic ingredient of a new thermosetting plastic that does the trick. By mixing this powdered molasses with plain bunker fuel oil and certain catalysts, we have come up with a thick black Plastic Bitumen we call Plastic B concentrate. By altering the formula slightly, we have made it in three different grades to produce different degrees of hardness.

Plastic B, mixed with clay and sand, produces a waterproof adobe brick hard as concrete. A different mixture of the same ingredients makes a cheap, quick-hardening paving material for driveways, highways, parking lots, tennis courts and landing airplane strips. Substitute clay and a fibrous filler for the clay and sand, and a brand-new plastic is formed, Plastic C. This can be mixed with water and sprayed outside a building to give it a tough stucco finish that won't crack or come loose. Troweled like plaster, Plastic C makes smooth inside walls, floors, ceilings and impervious table tops.

The real secret of Plastic B is the dehydrator, which takes the sticky blackstrap molasses and makes a dry granular substance of it—like brown sand. We had a tough time devising a drier to do the job. Centrifuges gummed up in no time. Freeze driers solidified the stuff in gobs. Hot air only did half the job, and if heat was boosted the molasses caught fire.

Today, in the pilot plant, the blackstrap molasses goes into a hot-air drier of our own invention. Blackstrap molasses is pumped into the top of the big drumlike drying chamber under pressure. There it passes through an area of high heat in a split second. It's powdered before it knows what happened, and falls to the bottom of the drier like snow. But it didn't happen overnight. For instance, until we put in strong, stainless steel pipe, feedlines burst under the tremendous pressure. Hot molasses would geyser all over everything. We spent weeks cleaning molasses out of our hair and scraping it off the walls and ceiling.

Once mixed with oil and catalytic agents, the powdered molasses flowing from the drier becomes a regular polymerized plastic with remarkable properties. Anyone can make Plastic B-brick himself. Take a regular mortar-mixing box, and hoe up what looks like cement. It's actually 65 percent plain sand, 30 percent clay and 5 percent liquid Plastic B. Water is sprinkled on and hoed in until the mixture has the consistency of stiff mortar. The man trowels this into wooden forms, one measures 4 by 8 by 16 inches, or about eight times the size of a regular red brick. The other is 4 by 8 by 8 inches. Off come the forms immediately and oddly enough, the wet bricks stay set. In three days they're dry enough to stand on end. They are laid the same way as conventional bricks.

There's nothing new about adobe bricks, but there's something new about these. The Plastic C acts as a binder and makes them as rugged as concrete. Plain adobe has never been practical in wet country because rain washed it away. Plastic B makes the brick waterproof. We have set bricks in water for 30 days beside other brick. Plastic B-brick absorbed two percent moisture, cement brick eight percent, and regular red ceramic brick twelve percent. Plastic B-bricks have been lying all over the yard in rain, frost and heat for a year. They still look and test as good as new in the jaws of the pressure jack in the laboratory.

We contend that since the bricks are dirt, "they're cheap as dirt." We have determined that it takes 3050 of the big bricks to make a one-story adobe house of five rooms. You'd need a dozen barrels of Plastic B at \$24 a barrel to do the job. That's \$288 for the main shell of your dwelling. You'd set it on a waterproof, Plastic Bized adobe slab. Then, used Plastic B spray on the walls and ceiling—and on the exterior if you want a stucco-type finish. You'll have to buy 2 by 6 rafters and joists. But the whole house should not cost more than \$150 a room, exclusive of plumbing and electricity.

And about that driveway? You can make that yourself, too, if you like and no one will ever be able to tell it from black top. Fifteen pails of plain beach sand to one pail (about two gallons) of Plastic B, and you've got about a square yard of driveway. In 24 hours, it's ready to use. No heavy compacting machinery is necessary, though the more compacting the harder the surface.

We compacted our own driveway with an ordinary lawn roller. Just rake out the Plastic B as you would an asphalt mix, and start rolling.

Probably the most versatile of all the molasses products is Plastic C—which is simply Plastic C mixed with clay and a filler. This can come ready-to-use in 10 gallon moistureproof bags, which can sell for about 60 cents a gallon.

Thinned with water, it can be sprayed on the outside of an old house like stucco, troweled on old uneven floors to level them and give them a continuous surface like rubber tile, spread on table and counter tops to give them a flat surface impervious to acids and alkalis, laid on interior walls like plaster or molded into forms. Since it's waterproof, it's ideal for lining anything from showers to old-farm outbuildings. Eventually, the material will come impregnated with a variety of color, so no painting will be necessary.

To show how it can work on an old building, a 150-year-old cookhouse was falling apart. Using the spray, we have put a complete new surface over the inside walls and ceiling, using about \$6.00 worth of Plastic C. We also troweled the thick material on the old, uneven wood floor. You use a mixture of mostly sand to fill in the low spots. Then a thin layer of standard Plastic C is laid on top. When the floor of the cookhouse is finished, the outside will be sprayed—right over the old shiplapping.

We usually nail tarpaper and fine chicken wire over the surface, so we don't have to fill in all the hollows and consequently use three or four times as much Plastic C.

When complete, the old cookhouse will be tight as a battery box upside down—sealed inside and out against weather, termites and moisture. All for a materials cost of about \$25.

Besides its unique qualities, we expect the demand for this molasses plastic to be high largely because of its low price—which we believe will always be low. Blackstrap molasses has jumped in price per gallon since we started. It's still cheap. But if it gets any higher, we'll switch to wood molasses, which is just as good and much cheaper. Sure it will be synthetic molasses, but Plastic B is synthetic asphalt. How synthetic can you get? As synthetic as necessary.

A number of people have questioned us about the wisdom of using sugary substance like molasses for building material. One woman wanted to know what we'd do to prevent ants and flies from eating her molasses driveway. We told her all Plastic B driveways and roads would have to be posted with ant-sized signs saying "Please Do Not Eat the Highway."

Actually, since the molasses has been completely polymerized, there is no sweetness or food value to be found in it. The experimental driveway only has a normal quota of ants and none of them look like they're eating it. But, you've got to admit that a molasses house really would be "Home, Sweet Home."

Very truly yours,
Robert Morse
United Nations
Centre for Housing, Building
and Planning
Box 20
Grand Central Station
New York, N. Y. 10017

Sent to us by the Transformer.

Thoughts on Space Heaters

... Heat is another problem. Now as I see it we have made no progress since the "Franklin Stove." Well this stinks. Let me explain.

Chimneys work by heating a column of air to make it rise. Therefor creating draft. A fireplace with heavy chimney is worlds worst, and the fire cannot be banked at night, cause the chimney is forcing draft over it, and making it burn harder. Fuel is gone quickly and now fire is out and all the warm air is pumped out of the house and boy! is it cold in the morning. Or else fire is smothered completely with the same results.

Stove pipe is very efficient. Warms up right now and gives a draft. This cuts smoke also. And when fire is banked it cools quickly and cuts off draft.

This works. Nothing works better. Everything else is between these extremes

So a stove with stove pipe chimney is postulated good huh? Lousy! When a stove burns it sucks cold air in the bottom and heats it using its oxygen so it must be exhausted from the top. Its full of combustion products and its poison so out with it. Now we have a vacuum in the building so every seam leaks cold air into it. You want to get warm so you sit close radiant heat is all you get as you are in the cold air circuit. And the warm air heats the ceiling and convection currents bring it around again to the bottom of the stove and so up the flue. Its small comfort knowing that you are heating up the outside and hastening spring. Of course this is severely aggravated during a storm with high winds. I was snowed in once with fire going up the pipe like a blowtorch and I had to cling to the stove to get warm. It was a pot type oil heater. Radiant heat just wasn't enough to warm the outer cover. Cold air was coming in everywhere. Windows were covered with plastic sheet and it bowed into the room very strongly. Chimney was a real pump. All we were doing was burning oil at a fantastic rate. I never saw such a flame in a gun type oil burner.

Opening the bottom of the stove to the outside would have made the inside of the house neutral as far as air pressure goes and would have made the air warm. This would not have prevented the fire from roaring as the chimney would still be a pump. But it couldn't pump warm air out.

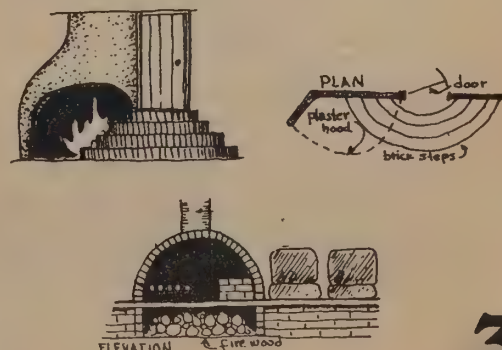
Now suppose we put the cold air supply in the center of the chimney. A gust of wind would pump air equally from both sides of the fire. The fire just wouldn't know it. It would continue to burn slowly. Not only that but the cold air flue now becomes a heat exchanger. The cold air is progressively warmed as it nears the fire and with waste heat 75% air is nitrogen which is heated for nothing and represents loss. This loss is mostly now returned as heat is extracted from it.

I think temperatures at the top of the chimney would be slight indicating efficiency.

I would like to build a stove such as this right now but cannot as am broke, busy, have no need, have no welding equipment. This must all change soon (I hope) it must anyway before I can think about my dome.

Perhaps Zomeworks could try it.

Love,
Bill Lange
Sweden



The Use of Propane

How to Propel Your Car with Propane
An Immediate Personal Action for Cleaner Air
(reprinted from *Freedom News*, February 1970)

In addition to long range cultural change, Ecology Action is interested in immediate personal actions aimed at waging war on environmental problems. In this endeavor we attempt to practice what we preach, and to that end have begun converting the vehicles upon which we must occasionally rely to propane gas (also butane).

We have culled the following information from Imperial Rock Gas of Richmond.

If you're interested in doing something about air and water pollution now, and drive a gasoline fueled, internal combustion engine vehicle, convert to propane. Conversion is a simple, financially beneficial operation which reduces your vehicle's harmful emissions by 50%. Some estimates go as high as 75% to 80% reduction in harmful emissions.

There are other ways to reduce your personal impact on the environment, of course, and several alternatives to pouring gasoline wastes into the eco-system. Walking is the best alternative of all, and public transportation use reduces your impact.

Gas turbines, steam driven and electric engines all produce less harmful exhausts than the present gasoline engine, but these alternatives are not possible ones for most people, for a variety of reasons. Electric, steam and gas turbines cannot be made available to any significant number of persons soon enough.

Propane is different. You can go to a local propane dealer who does conversions and have your car running on propane in one day. That's how long it normally takes.

The cost is approximately \$300 from which you can shave substantial amounts in a variety of ways. Labor costs about \$40, but the job is simple enough so that anyone with rudimentary mechanical knowledge can do it.

How it Works: Basically: A special carburetor replaces the air filter; a heat exchanger is mounted under the hood and connected to the water hose that runs to the heater; a fuel line must be run to the tank which is usually mounted in the trunk.

This last item, the tank, is the single most expensive aspect, costing \$120-\$180 for a new tank capable of holding 24-36 gallons of fuel. A used tank often costs less than half as much, so shopping around for one is worthwhile.

Even with these cuts in cost, however, the average American car owner may not feel he can afford conversion. But, as economists point out, cost is a relative concept against which we must pose benefits, and the benefits of propane are substantial.

First, as previously mentioned, the use of propane cuts harmful emissions by 50%, thus reducing air pollution directly and water pollution indirectly (hydrocarbons and other exhaust products are inevitably washed off the road by rain or precipitated out of the air).

Another benefit is that the use of propane can increase the life of a new engine from 2-10 years. According to Mr. Carl Warner of

Imperial Rock Gas in Richmond, forklift truckers, who have used propane for many years because of its lower emissions and the enclosed, indoor nature of much of their work, claim at least a 5-2 ratio of improved engine life. This is because, in part, the propane enters the engine as a gas, not as a liquid, and sludge and carbon are essentially eliminated.

Fuel Cost is Lower: Still another benefit of propane cost is fuel cost. Only one grade of propane is distributed: a high octane grade comparable to high test gasoline. The cost, in the Bay Area, is about twenty-four cents per gallon. Though the per gallon mileage of propane is about 3% less than gasoline, the consumer still saves a considerable amount, which, even excluding longer engine life, makes propane conversion profitable over the long run.

Cal Gas of Sacramento claims other propane benefits: cuts maintenance costs; cleaner oil; longer spark plug life—no carbon to foul spark plugs; instant cold weather starting—no flooding or choking of carburetor; fuel pump problems eliminated because there is no fuel pump.

Another consideration the potential propane converter makes is the availability of the fuel. Most cities of 50,000 or more have propane supply outlets. National and state listings are available from gas companies usually on request.

But even without careful planning the propane motorist need not fear being stranded without fuel, for the standard conversion operation leaves the vehicle with a gasoline potential which may be realized by flipping a dashboard switch. Just keep a small amount of gasoline in your car.

A few other considerations: If your car is air cooled (for example, Volkswagens) about \$20 extra must be spent for adaptive equipment. The higher the compression ratio of your engine the more efficiently it will run on propane (compression usually corresponds to engine size and number of cylinders but not always, so check your owner's manual).

Pressure Conversion: In addition to converting your own car, you can take a step toward lessening pollution by encouraging other individuals, industry and government to convert. Some steps have been proposed already in this area, e.g., Reagan's claim that state vehicles were to be converted and recently publicized intentions of Contra Costa vehicle conversions. Concerned individuals should keep track of these intentions.

If you want better quality air and water enough to do something, but don't think you can afford the initial cash outlay for conversion, you might consider trading in your present car for one worth about \$300 less and use the difference. You'll make it back in gas savings.

Further, remember that propane is only a partial and interim solution to pollution. Even with a converted car, you still are responsible for concrete highways, noise, congestion, Santa Barbara oil leaks and Torrey Canyon shipwrecks. The answers to these problems lie with

a deeper commitment to a quality life; with walking and relearning the joys of bicycle riding.

Distributed as a public service by Ecology Action Educational Institute
Box 9334
Berkeley, California 94709
Phone: (415) 843-1820

I have heard of a new car dealer who is using a free propane conversion as a way to boost sales of his left over 1969 models. (Hillsdale Dodge in San Mateo, spec.) He also tries to sell a propane conversion with all new car sales (\$500 per) by giving the customer a stiff lecture about civic duty and air pollution.—Fred

At least twenty PG&E service trucks fueled by clean-burning natural gas will soon be operating in the San Jose area on a trial basis.

If the test vehicles prove out well, additional PG&E service trucks in major metropolitan areas may be equipped with a dual fuel system: simply by pulling a dashboard lever, the driver can switch from natural gas to a reserve supply of gasoline. . . .

Motor vehicles are responsible for about two thirds of the contaminants in the air over the San Francisco basin, according to the Bay Area Pollution Control District. Tests have shown that motor vehicles using natural gas have reduced the emission of certain pollutants from their exhausts by as much as 90 per cent.

So far, the use of natural gas in vehicles is suitable primarily for fleet operations because of the expense of the large compressor needed to compress the gas into tanks and the weight—140 pounds each—of the steel tanks themselves. . . .

In addition to helping reduce air pollution, the natural gas-powered vehicles are expected to be more economical to operate. While the mileage and power are roughly comparable to that offered by high test gasoline, the clean burning qualities of 130-octane natural gas will mean less frequent spark plug changes and fewer engine overhauls. . . .

Natural gas-fueled vehicles are regarded as a partial solution to automotive smog; one that is available now. The state and federal governments and PG&E and other industries have announced their intention to convert vehicles to natural gas and experts predict that refinements of the system will develop as the result of these tests.

From PG&E Progress, March 1970.

Model Rockets

Model rockets, you say, what are they . . . idealizations of instruments of war? Not at all. They are idealizations of one of man's primal urges, mastery of the skies.

In practice model rocketry is safe (remote control firing, parachute recovery), inexpensive (average costs: engines—25¢, vehicles—\$2.50), scientific (limitless opportunity for creative one-man research), and great fun. Practical applications include smog sampling, weather studies and aerial photography. Model rocketry supplies became available as a safe and meaningful alternative to the dangerous "Basement Bomber" activities of amateur rocket builders impressed by the first Sputniks in the late 1950's. The National Association of Rocketry was formed to promote safe and educational model rocketry activities among manufacturers and enthusiasts.

Brochure: Free
National Association of Rocketry
Box 178
McLean, Virginia 22101

The inexpensive NAR membership includes a subscription to Model Rocketry Magazine, an independent and outstanding monthly mag produced by MIT students during their free time. Coverage ranges from elementary How-To articles to the unbelievably esoteric. Standard magazine format and circulation but it is managed as a sort of commune. All profit goes into an informal fund used for research and financing field trips to regional flying competitions and NASA events. Typical articles explain model rocket applications in tracking systems, telemetry, aerial photography, and activities in the Soviet Union, a country which long ago realized the educational aspects of model rocketry. Subscription available separate from NAR membership.

\$5.00 (for one year, monthly)
Model Rocketry Magazine
Box 214
Boston, Massachusetts 02123

There are nearly a dozen manufacturers of kits and parts to choose from, but ESTES and CENTURI are consistently the best. There are many similarities between these two, but their differences are striking. Estes is the venerable



pioneer, but it stresses bold innovations such as flexible landing gear and unbelievably inexpensive kits for aerial photography cameras (Still camera: \$4.00!). Soon to come out with a motion picture camera suitable for use in flying models . . . less than \$20 . . . WOW!

Centuri is noted for kits of handsomely detailed scale models and formidable power of their larger engines. Centuri, like Estes, has a well developed educational services program where free textbooks and discount prices are offered to any sort of reasonably legitimate educators such as teachers, Boy Scout leaders and Civil Air Patrolers. Both are mail order orientated, with excellent personalized service. The safe and inexpensive engines of all manufacturers are standardized and interchangeable. Estes and Centuri each send free newsletters to regular customers.

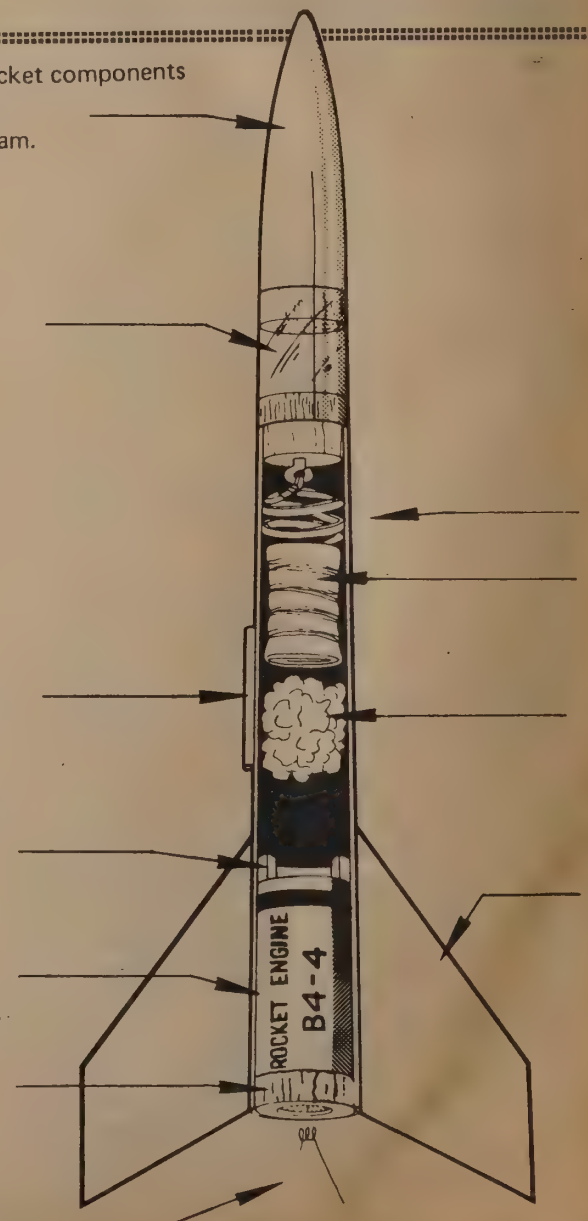
Model rocketry is a going thing, not only because it offers an opportunity for inexpensive creative research into the relatively unexplored field of sub-sonic rocketry, but because it is a fun way to participate in the Space Age.

Catalog: 25¢ Estes Industries, Inc.
Box 227
Penrose, Colo. 81240

Catalog: 25¢ Century Engineering Co.
Box 1988
Phoenix, Ariz. 85001

Melville G. Boyd
Midwest City, Okla

1. Label the model rocket components that are marked in the following diagram.



A Bicycle Page For You

Lightweight Touring Bicycles

Information presented in this **WHOLE EARTH CATALOG** review is to aid people in finding and buying good bicycles without getting ripped off.

Good bicycles are light, with high quality construction for a reasonable price, gearing sufficient for all road conditions, and efficient design and construction.

The touring bicycle configuration is the best by far. Touring cycles have drop bars (or "racing handlebars"), a narrow seat, derailleur gears, light weight frame and components, and a minimum of friction in all moving parts.

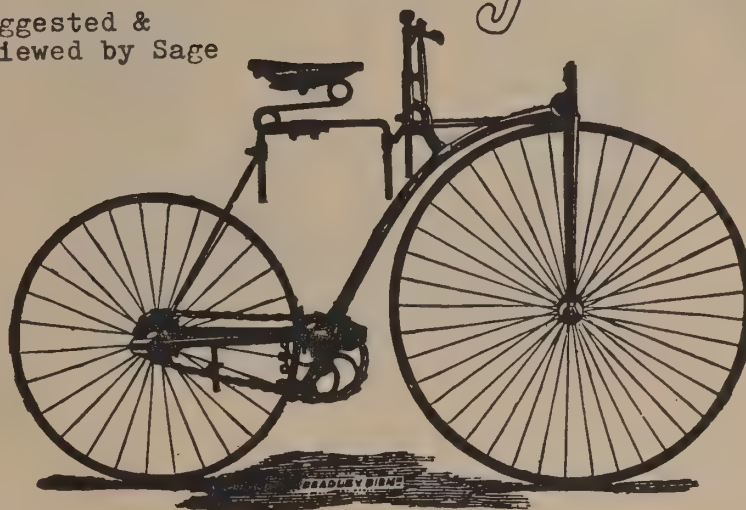
The drop bars and narrow seat setup put the cyclist in a natural forward leaning position that lowers the center of gravity, improves balance and handling characteristics, cuts wind resistance, and gains the maximum leverage from the legs. The narrow seat has little padding to keep the rider's ass from being rubbed off. Toe clips and straps are also standard, allowing the cyclist to apply power in the upstroke as well as the downstroke.

Derailleur gears are available in five, ten and fifteen speed combinations. Derailleurs give the widest range of gears in the most direct manner possible. Touring cycles also have narrow high pressure tires for less rolling resistance, therefore higher speeds, and high quality brakes (center-pull) for quick stopping.

Bicycles are small, inexpensive, require little maintenance, pleasurable to use, and smogless. If America traded in all their Detroit iron for bikes, a lot of problems would be solved.

Lightweight Bicycles

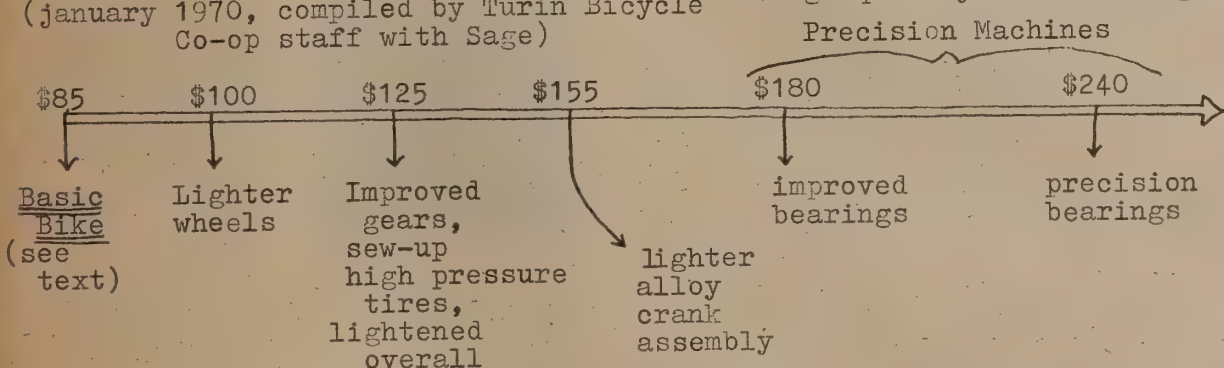
suggested & reviewed by Sage



PRICE/BIKE GRAPH

(January 1970, compiled by Turin Bicycle Co-op staff with Sage)

(high quality—well worth price)



Bicycle dealers/distributors of note

Stuyvesant Distributors
404 East 11th Street
New York, N. Y. 10009
(75¢ for catalog)

Turin Bicycle Co-op
2112 North Clark Street
Chicago, Illinois 60614

Thomas Avenia (east)
131 East 119th Street
New York, N. Y. 10035

Thomas Avenia (west)
10205 Rio Hondo Parkway
El Monte, CA

Big Wheel Ltd.
Department "K"
310 Holly Street
Denver, Colorado 80220

Cupertino Bike Shop
10080 Randy Lane
Cupertino, CA
95014

Cyclo-Pedia
6447 Michigan Avenue
Detroit, Michigan
48210
(\$1.00 for 60 page "handbook & catalog")

Pleasant Valley Shop
P. O. Box 293
Livingston, N. J. 07039
(mail order specialist for Clement cycles)

Hans Ohrt Lightweight Bikes
9544 Santa Monica Boulevard
Beverly Hills, CA 90210

Velo-Sport Cyclery
1650 Grove Street
Berkeley, CA

John's Custom Bicycle Center
741 East Dixie Drive
West Carrolton, Ohio

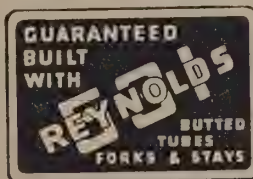
List, compiled by me and members of Turin Bike Co-op; is *not* a series of plugs—these are good stores that are better than most as far as ripping off goes. Turin of course is biased but other than Chicago stores on list they need not worry about competition. I personally feel the list is essential, as there are few shops in USA with the goods, and these are them.

BASIC

the basic **LIGHTWEIGHT TOURING BIKE** must have

- drop bars
- center pull brakes
- derailleur gears (5, 10, 15 speeds)
- narrow leather seat

When buying a bicycle, be certain of the availability of parts from dealer. Also, remain wary of Japanese equipment under \$200, and Huret/Sprint derailleurs, as they remain ripoffs for the quality offered.



OPTIMUM

the optimum **LIGHTWEIGHT TOURING BIKE** would have a lightweight steel alloy frame all around, the best brand being Reynolds 531 (see label above). It would also have lightweight alloy gears & other components, precision bearings (less friction, longer wear, stronger), sew-up high pressure tires, and a neat looking paint job. Most top of the line bikes made by major manufacturers have all these ingredients for about \$230 or more; their differences when choosing between the various brands would be the quality of component assembly, frame sizes available, and personal preference.

Reynold decal is not a plug; they are the only people in the world who make decent frames. Literally.

PUBLICATIONS

These publications are all nearly essential if you plan on checking out all available avenues before buying a ten-speed tourer.

Bicycling! (monthly magazine)
H. M. Leete & Co.
256 Sutter Street
San Francisco, CA 94108

Derailleur Lightweights—
New Dimension in Cycling
available from
Schwinn Bicycle Company
1856 North Kostner
Chicago, Illinois 60639

League of American Wheelman Bulletin
L. A. W.
5118 Foster Avenue
Chicago, Illinois 60630

How to Improve Your Cycling
The Athletic Institute
Merchandise Mart
Room 805
Chicago, Illinois 60654

Complete Handbook of Cycling
available for \$2.10 from
Big Wheel Ltd.
Department "K"
310 Holly Street
Denver, Colorado 80220



Intrepid Trips

INFORMATION SERVICE

The Medium and The Message

Vol. 1, No. 1

Entered as high class matter at Springfield, Oregon

March, 1970

"Gordon Sez"

Midwinter is past in wettish Oregon. But it started raining again today after the daffodils and willows have come out. Nancy and I still have a work schedule: She's working regular hours at the Creamery. I'm freer of that: following my nose into new occupations. So far I have only spent money, not received it. But I'm not really hoping for it, money. That comes when I don't have any more to spend.

The gang got a little office downtown in Springfield, \$35 a month, half of a building housing Springfield's only hip business, a \$10-a-day poster shop. I clip newspapers, talk, dream, give up fancy ideas, puff myself up, hang out with the boys, study things if I want, make and drop little habits. I have dreamed of being a booking agent, a famous writer, elected to City Council, a civic leader, news commentator, and so far have managed to be janitor and a writer of a single letter to the local newspaper.

And I am the messenger: in my car during the day I visit people, bring them things, ask them questions, tell them the news.

Been feeling pretty good since I got up here. Living on the Farm was a good adventure, catching me up with what other people had been doing in their late Sixties. Now it's the Seventies, Year One A.P. says John Lennon. Time to get it together in communities that work, that is, work on the community that already exists: our town, our friends, our business worlds. I haven't had to hassle for money so I've been giving a lot, and it's good. Hasn't hurt me yet.

But Springfield as a community is a challenge: a declining, industrialized, flat, poor, smoky town. I've never been to Liverpool, or maybe I have. I talk serenely about somehow starting a New Springfield. But somehow I first thought of it in commercial terms: bring in hip businesses. Even get into government. All that is risky work. I'll go real slow. The gentlest attempts to guide Nature's hand or foot.

I could say the news. Kesey's fixed up the barn to live in. Hagen and Keith have been living in Eugene but their house is breaking up this month. Babbs got a fine old farmhouse in the fertile river flats near Springfield. Boyd is thinking of moving to Boise to manage the sales of the plastic bottle factory. Bud is looking for someone to open a health food store next to the Creamery. We have all been playing basketball we're about in the middle of the Springfield Industrial League as the Springfield Jugs. Nancy, Sue and I heard Richard Alpert, and he gives a fine talk, very spiritual. Nancy was getting sick frequently this winter, "I have been sick since I got to Oregon" she exaggerates. Antibiotics. I got skinny, lost 25 pounds since California. Nancy is the rage of the Creamery: mod clothes are a big treat for the tired eyes of Springfield. Zacha the dog is pregnant we hope, hope it will slow her down. We hear little from California. Mostly we visit, September then Christmas. My brother is engaged, will marry in June at Duke, far away. My sister just had a girl, "dark hair and a big nose", born on Nancy's birthday, Groundhog's day.

Waiting for spring. Hoping for SUMMER adventures: one trip to Japan and India, please. We're prepared for visitors right now, come see us. 1108 North 8th, Springfield, Oregon.



Dream Trucks

I see three bright-white cable-car trucks, little flags at the corners, brass portholes side and rear, red-white-and blue awnings on the sides, basketball hoops attached, parked in a semicircle. Happy people everywhere. Kesey is Mobile. Hagen is Unit. And Babbs is One.

Springfield Jugs Reach Playoffs

The Springfield Jugs have ended regular season play with a 4 and 3 record, good enough to tie them for third place and put them into a playoff slot for a playoff berth. . . .

That's right. First they play off with two other teams to determine third fourth and fifth places.

Once that is established, the top four teams go into post-season competition for the championship.

New Look at Farm

Kesey and Faye and the kids have moved "Full time" into the Barn.

The room you once knew as the dance hall is now the combination kitchen-dining room-living room.

It is a slow process changing over, but enough has been accomplished that the Aunt Jane Memorial Dining Hall, scene of great feasts and complicated gatherings, is now shut down.

Creamery of the Air

Intrepid Trips Information Service's first film production is here. A four minute color and sound commercial for the Creamery. It shows the bad guy from Darigold (played by Babbs in a suit) roaring up in a Lincoln, striding through the creamery, and telling Chuck that his credit is no longer good.

Kesey directing, Hagen shooting, Gordon hauling the camera cart, Jim holding the light, Zodiac coiling the cords. Babbs coming on, umbrella, harrumphing.

And now we've all seen it on TV. We are waiting for the customers.

Sink Still Not Operating

The new sink and lengthy counter has been installed in the barn, but as yet no drain nor water pipes are in.

Gordon suggests cutting a hole in the floor and draining the sink onto the ground, but Babbs Hoo-Haws the idea.

In the meantime, water is close at hand in the bathroom.

Two Arrested At Creamery

The two owners of a Springfield electronics research firm pleaded guilty in Lane County District Court Wednesday to a charge of "illegal operation of a distiller."

Joe Houston Kesey, 31, of 1275 Janus St., Eugene, and Melvin Arnold Haxby, 28, of 1166 S. 39th Pl., Springfield, entered the pleas during their court arraignment. They were to be sentenced Wednesday afternoon.

They are partners of Antron Laboratories, 123 N. Third St., Springfield, located in the same building as the Springfield Creamery, which Kesey owns.

Springfield police arrested the two men on the misdemeanor charge Tuesday after confiscating nearly three quarts of what was described as 108 proof liquor, made from approximately 150 gallons of apple wine. Police said the distiller apparatus was located at Antron Laboratories.

The two men were arrested in the office of the Springfield Creamery.

Assisting in the arrests and confiscation of distillery equipment were representatives of the Oregon Liquor Control Commission and the Alcohol, Tobacco and Firearms Division of the Internal Revenue Service.

Detective Leroy Bergstrom of the Springfield Police Department said seven officers of his agency also participated in the arrest incident. That many men were needed to confiscate the apple wine, the hard liquor and equipment, he said.

The men each posted \$500 bail following their arrests. Kesey said they had learned the day before, when police inspected the distillery, that they would be arrested and made preparations for coming up with bail.

Kesey told a reporter that he and his partner made a vat of apple wine and decided Sunday "to distill it off."

Following the arrests, a state inspector attempted to inspect the creamery, but was refused entry by Kesey's wife, according to Joe Grey of the State Agricultural Commodity Commissions.

Kesey is the brother of novelist Ken Kesey and the son of the late Fred Kesey, longtime manager of Eugene Farmer's Creamery.

KEN KESAY AND MERRY PRANKSTERS LAUNCH EXOTIC NEWS SERVICE

by Lee Quarnstrom

My friend Ken Kesey stopped by the other evening. He and several members of the Merry Band of Pranksters were en route to their Oregon farm from Los Angeles, where Kesey's been dicking with some movie producers and where the Pranksters bought three old bread delivery trucks, 1938 vintage.

Kesey is involved in the production of "Electric Kool Aid Acid Test," a film of the book by the same name written by Tom Wolfe about Kesey and the Pranksters. I gather that he is a little too far out for Hollywood and for the company making the movie. But he says he is educating them down there.



Faye on Crutches Attacked by Rooster

The Rhode Island Red Rooster finally scored on Faye. After six months of harassing her, he caught Faye at the watering trough where she was filling the trough and watching the Peacock, who was doing a magnificent dance.

"It felt as if someone hit me in the leg with a ten pound sack of sugar," said Faye.

One of the Rooster's spurs punctured a vein, which bled internally and swelled her leg so bad she had to go to the doctor.

One of his latest projects is a news service. It's called Intrepid Trips Information Service (IT IS) and has an office in Oregon.

Most news services use teletypes or at least air mail to get the news from its source to the media. Not IT IS. Kesey's plan is to deliver the news in the three 1938 bread trucks, each with a top speed of 38 miles an hour.

When IT IS gathers a piece of news one of the newsmen will get in a bread truck and deliver it to whoever is interested. Kesey admits there are still a few bugs in the plan but he is confident of success.

One of Kesey's complaints about other news services is that they frequently distort the news. I don't know whether this is entirely true but I know that it's often difficult to figure out what's happening if one's only source of information is a wire service dispatch.

So, Kesey says, he has figured out a way to avoid distortion of news. His secret will be to report news that no one is interested in. Or else, he says, he will report news of interest to so few people that there will be no reason for or possibility of distortion.

For instance, if a Prankster gets married, has a baby, inherits a million or walks on water IT IS newsmen will get in their bread trucks and deliver the news. But they'll only deliver it to other Pranksters, I guess.

Kesey's plan, as I see it, is to have the Pranksters and the bread trucks be the media. And the media will be the messages.

I think Kesey's got a good idea. He won't put UPI or the AP or Reuters out of business but on the other hand those wire services won't put IT IS out of business either.

A person whose opinion I respect once told me that page two—the vital statistics, the deaths, the births, the divorces, etc.—was the first page everybody in Watsonville reads when they get the Register-Pajaronian.

In a sense Kesey and IT IS will be delivering vital statistics from their bread trucks, not hot off the press not hot out of the oven, but right to your door.

Intrepid Trips on Tour of College Campuses

The Information Service goes on the road this week. We have accepted three of Kesey's speaking engagements. The results are unpredictable.



An evening at Oregon State University's Home Economics Auditorium. Well, we have some practical thoughts on home economics.

A day at Reed College. When I was going to Swarthmore College we always said (nose in air) that Reed was almost as "good" a school as Swarthmore.

A weekend at the University of Victoria (B.C.) Will they really let us across the border?

I'm hoping we'll take our three Divco trucks. They are half painted now. Grey undercoat to be covered with Creamery White. Thirty-five miles an hour. Drive standing up. Not enough room for Babbs to lie down full length (that's long).

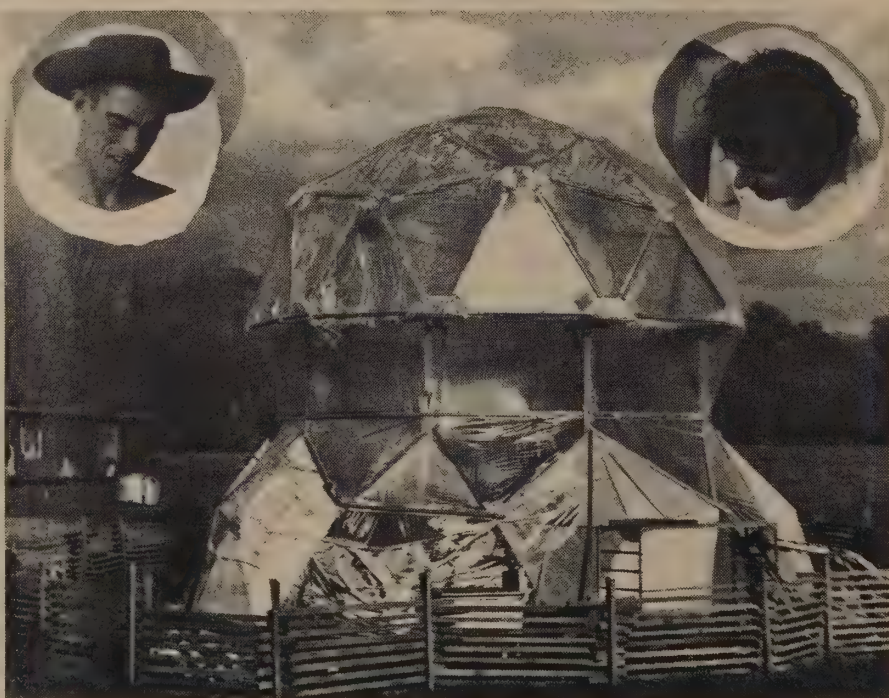
Baby Naming Party

At a party at Gordon and Nancy's house, Babbs and Gretch finally named their new baby. Everyone wrote down names on a piece of paper. Babbs and Gretch picked three they liked, and then a vote was taken to determine the most popular name.

The three names chosen for the vote were: GABE, O.B., and Joh.

After the secret ballot, it was discovered there was a tie. So the top two names were merged into one: O.B. Joh

Babbs and Gretch dutifully registered O.B. Joh at the County Court House



Farm Dome. This is the most organic building at the Kesey farm, it having grown from a tiny dome which disintegrated in a windstorm, to this monster built out of 2 x 4's and covered with 6 mil plastic. The insert shows Paige on the left and Dick on the right.

Cut The Motherfuckers Loose

Ed McClanahan found these notes by Ken Kesey in a box of stuff, two and a half years after Ken made them the night he got out of jail. The notes were made as Ken was waiting to be released. They are published here unrevised, and unedited.

FRIDAY OCT 10,
A TANK,
MAYBE THE LAST TIME

And as I come in dressed in my usual street business, leather, striped pants and shoes, whistle hanging out, Derner takes one look and his already stone face freezes even harder.

"All right, Kesey, give me everything."

"What?" Usually they let the honor camp men take in anything except knives or watches.

"Everything. I don't want you in there blowing your whistle."

"Okay, then, make me out a property slip."

He gives me a steady unwavering stare through the bars. Tears a scrap of paper from a notebook and slips it in the typewriter.

"One Whistle," I say. He doesn't type. "One yellow pen." He continues to glower, stoney cold unmoveable. "Come on, I want a property slip." I'm worried about my two camp notebooks is what we both know.

"Just put it all in the trough, he says. "In fact, strip out of that jacket!" He comes out of the cage. I take off my leather jacket. "Hands on the wall. Spread 'em." He gives my feet a kick. "Now. Don't move!"

He frisks me, the whole show. Taking pens, sunglasses, handkerchief, everything. And my two notebooks, wrapped in the farewell card Stevenson made and the camp guys signed.

"Listen. I get a property slip for this stuff."

"While you're here, you do it my way," Derner lets me know. No malice in his voice. No anger. Just stone information and not to be argued with.

"Okay then," I hold up my two notebooks. Show them to Deputy Johnson. "Witness these?" And the rest of the men waiting in the receiving hallway. "You guys check this?" Then hand the notebook to Derner.

"You think the rest of your book will come out in Ramparts?" Deputy Johnson asks.

"No, it'll be a book of it's own."

"You'll have to change the title then."

"I'll bet you a carton I don't," I say, watching my pens and notebooks disappear through the cage window.

"Okay, Kesey, you can move on. Next."

I come to A Tank. Boro is still here. In blues now. But still trying to keep up that old front. One by one the other guys show up. Derner has given them each the same treatment taking cigarettes, everything.

"Sorry about that," I tell them. "I should have been way at the back so you could have gone through first. But he saw my outfit and it blew his head so he had to follow through with the rest of you."

"Yeah," Boro says. "Stir clear of Kesey, he brings you nothing but trouble."

"Kesey!" Keys jingle. "Man's here to see you." Door slides open. I follow the turnkey to where Faber waits in front. He tells me I'm getting out at midnight. Who'll be here to pick you up? Who knows.

And he wants to see my notebooks. I'm leery but I figure better him than Derner. "Go ahead."

"And you're to be in my office Monday morning at 10:30 to sign your release to Oregon."

I say okay. We talk a little more about the camp. I tell him that all the camp needs is support from Redwood City. He hems and hums. Asks me when I think The Book will be coming out. Who know? When it quits happening. "This talk will be in it. Our talk Monday morning will be in it. Your reaction to what you read will be in it. It will be finished when its all over."

And Boro shouts Kesey. "Put this down. Put this down in your fucking book. A guy—me—a guy plays pinochle 4½ months with the motherfucking brass up there—4 and one half months—and one of the deputies misses a pack of Winstons when I leave and he calls down and asks what brand of cigarettes did Boro come in with. I mean, ain't that cold, man? Ain't that a bitch?"

Weekenders—bringing the Street in to tantalize you.

You can be made to serve double time—now time and street-to-come time—even triple time which adds street-ago time and is called guilt. But the man who pulls straight time—now tripping is neither short or long but serves in Eternity and very close to paradise.

More Weekenders. A Tank gradually burgeoning. "Hey Deputy, we already got motherfuckers, wall to wall." Boro has a way of sniveling so it sounds like a banty crowing.

*Drunk tank full to overflowing
Motherfuckers wall to wall
Coming twice as fast as going
Heads get big and the tank gets small.*

*Dominoes slapping on the table
Bloods playing bones in tank next door.
Bust a bone if you be able
Red Death stick it good some more.*

*Three days past my kickout time
Ask to phone but don't got the juice.
And crime times crime just equals more crime
Cut the motherfuckers loose.*

*Will I make the Christmas kickout?
Will commissary come today?
Will they take my blood or take my good time?
Or just rip my guts away?*

*Some snitch has found my fucking outfit.
They've staked a bull up at the still.
They've found the pot sprouts I was sprouting
At the bottom of the hill.*

*They've punched my button, pulled my covers,
Blown my cool and ruint my ruse
They rehabilitated this boy
So cut this motherfucker loose.*

*And the fish that angles for the bull
Let him off his heavy rod
And you that suckers the gavel banger
Cut him loose from playing God.*

*Back off from Johnson all you peace freaks
So he'll back off from Vietnam
Cut loose the squares, cut loose the hippies
Cut loose the dove cut loose the bomb.*

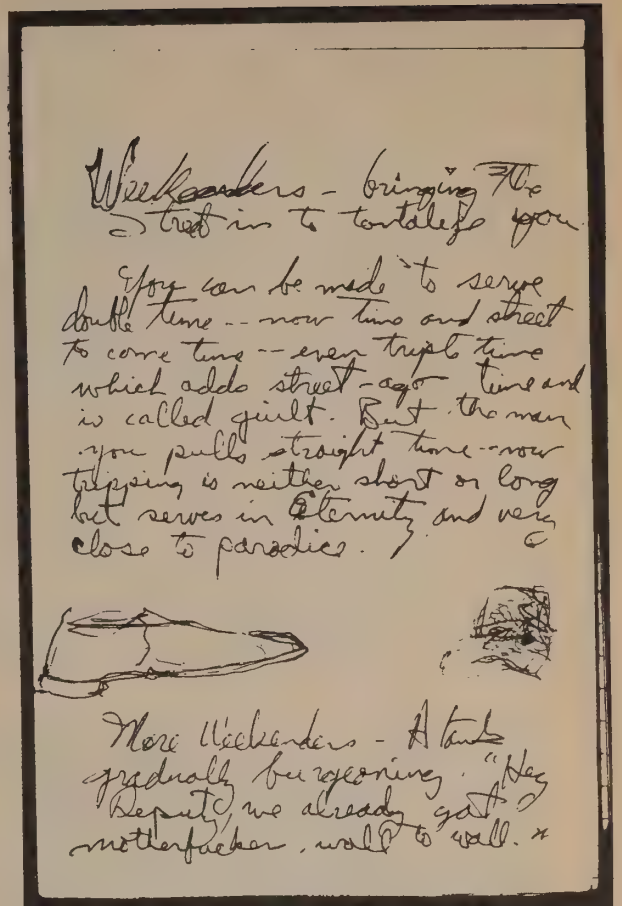
*You the finger on the trigger
You, the hand that weaves the noose
You, you hold the knife of freedom
Cut all the motherfuckers loose.*

11:30

After a long talk with Braun, soft-peddling in circles and coming in Contact occasionally—back to A Tank.

Simpson: "I just don't trust Braun. I don't think he's got any balls. I think he's basically weak and I think he's trying to build his image by associating with you, Ken Kesey."

I know all that. But I'm also onto what he wants to be—the strong thing he wants to be. And I'm willing to try to support that image.



Then a voice at the bars: "11:30. Kesey? Yeah. You ready? Ready as I'll ever be. Come on then."

And into receiving where an old colored dude is excitedly getting into his clothes. Typing of forms next door. Ritual of red tape typing, gently typing at my chamber door—

The colored dude—an old shoe-shiner packs his work gear into a black cardboard box and ties it with a rag. His shirt is white and looks nice. His shoes are a sensational gloss.

"What you in for?"

"Oh I pulled a knife. Woman called the cops. Wasn't no actual fight. Well, I on my motherfuckin' way..." Picking up his bag and putting on his hat.

"Yessir on my way."

"Good luck to you."

"Lost some weight here. Needed to. Met some good people too. All right now..."

A young blood stops him, gives him his address.

"You all better print it. That the only way I can read it."

"Take it easy now, Pop."

"All right. ..."

The kid leaves. "Damn fool tramp. Got some motherfuckers in this jail. Oh, I'm ready. City be just right. I get the right bus, that is."

Still no call to leave. He fingers a corn cob full of tobacco, lights it, goes to lean at the door. "What the time?"

"12 straight up," the deputy says.

"Oh, I'm ready."

"If my people are there I'll give you a ride to the bus station."

"Appreciate it. Didn't sleep all night. I got nothin but time no way. What you in for."

"Dope. Weed."

"That a shame. That good green stuff. Make you feel good. If God hadn't wanted it on airt he wouldn't a put it here would he. That a stone shame. How much they give you."

6 months. \$1500. 3 year tab.

"That a motherfucking shame."

"Well. It's done."

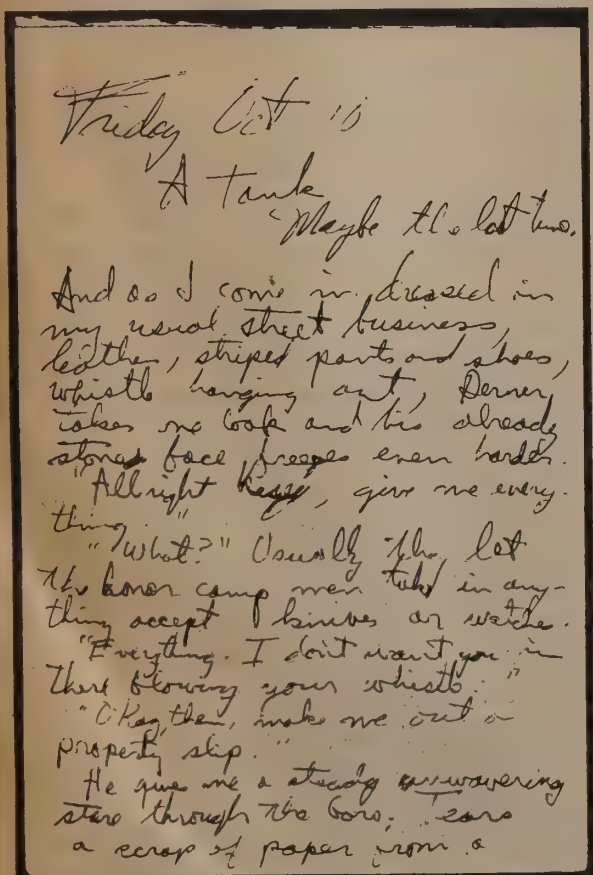
"I reckon."

"Rucker!" a bull's voice calls.

"I comin'."

And I'm alone on the bench with his half-drunk cup of coffee, spoon still sticking out of it. His blues on the floor. The polyethelene bag his suit had hung in in the corner.

"Ken."



The Land and the People

by Cleofes Vigil

I've heard it said that more and more longhaired youths have gathered large amounts of money with the proposition of coming and buying terrain in Northern New Mexico. These young people are calling themselves "People of the Earth." Well everyone living is a person of the earth because we came from the earth and to the earth we shall return. The idea of people of the earth is not a new one.

Well, besides this, there are already groups of these very strange young people in Taos County. A very poor county in the Sangre de Cristo Mountains, a county with mountains, hills, canyons, and ravines that does not have cultivable terrain. For a large group of people to live from this land would be impossible. Another point is that lands in Northern New Mexico are places of much rock, hilly, and very dry. Not only is there very little water but more than half the land is National Forest.

These lands at one time were land grants belonging to the Chicanos, who at this time are fighting the Federal Government.

At this time the land grants are being investigated under the Treaty of Guadalupe Hidalgo. Lands in New Mexico should not nor can they be bought or sold, and have no doubt that Chicanos will continue to move forward to an increased struggle, with the government in the end having to listen to the

demands of the true people of the earth—Los Chicanos. I will tell you now of the difference between the Anglo-Saxon and the Chicano.

The Anglo believes in the power of money, and it is known that money is the root of evil, and naturally is the father of individualism. Now, contrarily the belief of Chicanos is in living and letting live. Ninety per cent of Chicanos are poor and we desire that people not imitate us, to show us poverty, because we already know what it is. We also know how to combat poverty and exist because we are truly people of the earth, who will survive, prosperous country or not. And now these young hippies desire to unite with La Raza. You can be sure that there is great mistrust and lack of confidence. There is no doubt that some Chicanos have joined these confused young people but you can be sure that the majority will not. The majority will not accept these people. It is not that Chicanos are better people, but that the Chicano culture is better, and never can we accept the strange ways of the hippies. There is much difference! In What?? The Indianized Chicanos are truly people who know what it is to respect our mother earth and the mountain country. We are sons of noble, virtuous, and loving parents. And if in our saintly Raza we find corruption it is due to the Anglo-Saxon influence and frankly I will tell you Anglos, that you have robbed us coming and going.

You are the ones who are corrupt and don't want to do your dirty work alone and so you blame those whom you consider inferior. In this country,

which your parents call a democracy, and ruled by your parents with lies, robbery, and assault in the name of God Almighty—to make it sound better. My people know now from where you come and as the great brother of my Raza, Jesus the Nazarene, taught; 'You will know the tree by the fruit it bears'. I am not the leader of any group but I know mi Raza, because all my Raza walks the same path and I consider myself a humanitarian. I know and recognize the Creator and because of my human concern for others, I desire no insult nor injury to anyone. But I will suggest to those groups who want to live from the land, like the Chicano and his Indian brother have done, that they look for land in Texas or Kansas or other plains states where it rains more. There they can harvest enough for groups of 30, 50 and 100 members and all can eat from the same plate and sleep in the same bed as brothers of love as you call yourselves. You could also receive better advice from your own people, since you people do not talk our language. We do speak yours and like I said before we know who you are.

You say that you want to learn from my Raza. It is known historically that your ancestors did the same, but when it came time for hard work, they dedicated themselves to writing books about what they had learned from us and claimed it as their own. Remember that I hate no one and write this for your understanding, my desire is peace and harmony but this will never be possible until the Anglo recognizes who is the creator of creation. This is also within you, but if I told you now you

would never agree, and because of your disagreement you will never know the Chicano. My people are arising today and asking your government for justice. We will get justice one way or another. Long live my saintly Raza who valiantly fights for justice! And to the whole world mi Raza proves that we are carnales and the true people of the earth. Why? Because we respect the earth as the mother of life and do not exploit her.

We do not pollute the air and water of our mother earth. We are aware of the nourishment our blessed mother earth can produce. From earth were we formed from the earth do we live.

Now many of you hippies say you are involved in a social revolution. Against who? Against your very same parents! Well do not make it worse for La Raza because we have had more than enough of your false praise.

Continue on to where there is more space and leave us alone in our poor communities. The truth is that we do not desire to unite with you and do not add more problems to the heavy ones we already have. We don't care for your progressive methods that you have spoken of from time to time.

Please! Leave us alone!

From: *El Grito Del Norte*, Feb. 11, 1970.
Vol. 3, No. 2

Sent in by Tom Duckworth. [Hey Tom, send us Access Information on *El Grito del Norte*]

Be Prepared

Revolutionary Letter #3

store water; make a point of filling your bathtub at the first news of trouble: they turned off the water in the 4th ward for a whole day during the Newark riots; or better yet make a habit of keeping the tub clean and full when not in use change this once a day, it should be good enough for washing, flushing toilets with when necessary and cooking, in a pinch, but it's a good idea to keep some bottled water handy too get a couple of five gallon jugs and keep them full for cooking

store food—dry stuff like rice and beans stores best goes farthest. SALT VERY IMPORTANT: it's health and energy healing too. keep a couple pounds sea salt around, and, because we're spoiled, some tins tuna, etc. to keep up morale—keep up the sense of "balanced diet" "protein intake" remember the stores may be closed for quite some time, the trucks may not enter your section of the city for weeks, you can cool it indefinitely with

20 lb brown rice
20 lb whole wheat flour
10 lb cornmeal
10 lb good beans—kidney or soy
5 lb sea salt
2 qts good oil

dried fruit and nuts
add nutrients and a sense of luxury
to this diet, a squash or coconut
in a cool place in your pad will keep six months

remember we are all used to eating less than the "average American" and take it easy before we ever notice we're hungry the rest of the folk will be starving used as they are to meat and fresh milk daily and help will arrive, until the day no help arrives and then you're on your own.

hoard matches, we aren't good at rubbing sticks together anymore a tinder box is useful, if you can work it don't count on gas stove, gas heater electric light keep hibachi and charcoal, CHARCOAL STARTER a help kerosene lamp and candles, learn to keep warm with breathing remember the blessed American habit of bundling

Diane Di Prima

from *countdown*, a subterranean magazine 95¢ from: Signet Books, The New American Library, 1301 Avenue of the Americas, New York, N. Y. 10019

When the Enemy Attacks Have These Things Ready

Everyone should now realize that the cold war sometime is bound to turn into a nuclear war. The Chinese with their terrific hatred of us would welcome nuclear war that would destroy all of North America. They must have land for their people and the obvious thing for them to do is to destroy North America completely then to colonize it after several years. A group of Russian bombers which the Chinese have, could be sent to bomb us any day and before we bothered to find out who the pilots were we would bomb Russia and Russia would bomb us. The starting of a nuclear war would mean absolutely nothing to the Chinese to achieve our destruction and they, of course, now have nuclear bombs.

Have these minimum items ready for your wife and children. You may be able to tough it through, or do not care whether you live or not but, you should give your wife and children a chance to survive. These things will mean more to them than all of the wealth in the world that you could give them.

When a bomb strikes all electricity, coal, food, gasoline, medical and clothing supplies are cut off. Gas lines, railroads, highways, gasoline refineries, water supplies and all transportation will be knocked out. Your money will be absolutely valueless. Food in your electric freezer will spoil. Canned food will spoil if frozen. You must live on what you have stored in your home.

1. A sleeping bag for every one in your family. — 2. One or more wood burning stoves. — 3. A 5 gallon plastic water bottle for each member in your family. — 4. Minimum of 500 wood matches. — 5. Year's supply of mosquito and insect repellents. 10 yards of mosquito netting. — 6. Year's supply of aspirin, iodine, laxatives, bandages. — 7. 1 gallon of canned honey per person. — 8. Year's supply of dried foods such as beans, peas, flour, corn meal, sugar, cocoa, tea, rice, powdered milk, coffee etc., per person. — 9. Two gallons of apple cider vinegar per person. — 10. Year's supply of canned cooking grease. — 11. Year's supply of soap. — 12. Year's supply of tobacco. Tobacco is worth much more than anything else when it becomes scarce. — 13. One or more 22 caliber revolvers and 500 rounds of ammunition for each. 500 rounds of shotgun shells and a shotgun. If possible 100 rifle rounds and a rifle. — 14. 1 dozen steel traps size 1. 50 yards of soft copper wire for snares. — 15. 100 fish hooks and 200 yards of fishing line (Fish and animals are usually free of radiation about one month after the last bomb blast.) — 16. A good knife for every one in your family. — 17. Two good axes. Shovel. — 18. A year's supply of sewing thread, mending yarn and needles. — 19. 1 large metal soup kettle. 1 large frying pan. 2 medium sized cooking pots.

from *Herter's Catalog*, 1970; 656 pp. \$1.00 postpaid from: Herter's, Inc., Waseca, Minnesota 56093

Choose a tall maple, the trunk of which is about 8 inches in diameter and slightly curved. This curve will produce the sloped back obvious in Figure 2. If you would rather the back be straight, choose your maple accordingly.

Saw a 3'6" length out of the curved section of the trunk for the back posts; a 1'8" length out of the straight section for the front posts; and a 1'4" length out of the straight section for the backs.

At the same time, choose a tall, straight-grained white oak 4"-6" in diameter. From the trunk, cut one 16" length, two 14" lengths, and save the rest for splits.

Quarter the maple sections to be used for posts. Split out the heart. Then round the quarters off using first an axe and then the shaving-horse. (Plate 3.)



Plate 3: Legs are shaped with a shaving horse and drawing knife.

HOME REMEDIES

FOR ASTHMA:

1. Take a sourwood stick which is fresh and has a one year's growth, and notch it once for each year you have been living. Stick it up under the eaves of the affected person's house. When it dries enough so that the stick binds to the eave, the person will be cured.
2. In one pint of gin, place several pieces of the heart-wood of a pine tree. Leave them in the gin until they turn brown. Then give one teaspoonful of the mixture twice a day.
3. Take a child who is large enough to follow instructions into the woods. Stand him beside a tree and drill a hole just over his head. Then get him to turn around and cough into the hole. Drive a wedge into the hole immediately and saw it off flush with the trunk. The person in charge of the treatment then says something which is secret. When the child grows past the hole, he will be cured.
4. Suck salty water up your nose.
5. Smoke rabbit tobacco.

POTATO CANDY

Peel and boil one large white potato. When done, mash up with a fork, add a little salt, and pour in a box of confectionate sugar. This makes a stiff dough. Roll out on a dough board that has been well floured in a layer 1/4 inch thick. Spread peanut butter all over top. Roll up like a jelly roll (make two rolls if you like). Put this in the refrigerator. Cut with knife. Serve. Good any time.

FOXFIRE

Probably no region in the country has been written about, "explained" and "interpreted" any more than the Southern Appalachian highlands, that mountainous area embracing parts of Georgia, North Carolina, Tennessee, Virginia, Kentucky and on up into West Virginia. And yet, no region is as little known or more misunderstood. Most of the writers and film documentarians who have paid attention to Appalachia have suffered from one social/economic bias or another, or, what's worse, a pasty sentimentality inherited from romantic writers of the John Fox Jr.—James Lane Allen school. Even native writers all too often fall victim to the same stereotypes and cliches that have marred so much of the reportage in the national media.

There are, however, scattered here and there through the Appalachians, a few small journals who are truly in touch with the place they claim to represent. And one of the best of these is FOXFIRE.

FOXFIRE is a quarterly publication concerned with researching, recording and preserving Appalachian folk art, crafts and traditions. A typical issue contained articles on quilting, chairmaking, soapmaking, home remedies, mountain recipes, feather beds and home-made hominy, plus regional poetry and book reviews. One issue was devoted entirely to log cabin building. These are not superficial "feature" articles, but definitive, detailed treatments of traditional skills and crafts that have come close to dying out of our culture.

FOXFIRE would be a credit to a group of professional folklorists. But when you consider that it is edited and published by high school kids at the Rabun Gap-Nacoochee School in Rabun Gap, Georgia, it becomes impressive indeed. The thing I like most about it is the way these kids are looking immediately around them for their inspiration, instead of taking cues from New York and California. In their own way, these people are as hip and sophisticated as any young people putting out a magazine on either coast. More so, even. They're cooler, more adult. Next to FOXFIRE, most "underground" papers seem written by children shrieking at Daddy (or cops, or Nixon) because he won't let them smoke grass or smash store windows. FOXFIRE's editors and writers, (and some excellent photographers) seem to me as aware of what's wrong with the world as anyone. The thing that distinguishes them from their shrill counterparts in the cities is the absence of fad, slogan and cliché as they set out to improve the world. These kids in Georgia are living in a real world, studying real things, and in consequence they are creating a wonderfully real publication in FOXFIRE.

FOXFIRE

\$4.00 /year (quarterly)

from:
The Southern Highlands Literary Fund
Rabun Gap
Georgia 30568

FOXFIRE



Can you wash your clothes in it? "Yeah, you can. Just take that, y'know, like we used to - we took our clothes and put our soap on 'em and rub 'em and boil 'em. People don't do that now. And I ain't afraid t'wash my hands in it! That there lard kills th'lye." Why do you stir it so much? "It requires it. It wouldn't make if you didn't dissolve it good. You got t'get it thick like jelly, y'know. Y'can't leave jelly 'till it gets right."
(L-R: Elizabeth Rickman, Andrea, Emma Jean Buchanan, Mrs. Martin)

"And you know, that stuff never molded a bit in the world. Cut hay on the old of the moon," he continued, "and it'll dry a third quicker than it will on the new. On the new of the moon, the sap is still in it. It'll dry, but it'll take a lot longer. It's the same with wood. Cut it on the new, and when you put it in the fire it'll spew water out both ends all the time. It'll rot before it'll dry. And take sand in a river. I've noticed this out fishing. On the new of the moon, the water's full of sand as it can be, and if you're standing on the edge barefooted, the water will pull the sand right out from under you and sink you down. But on the old, the water's clear. It never carries sand.

"Another thing. Dig a hole on the new of the moon and you will have dirt to throw away, but if you dig it on the old of the moon, you'll not have enough to fill it back again. Look, if you don't believe me, try this, and if it doesn't work, I'll give you a hundred dollar bill. Dig a post hole on the growin' of the moon. Dig it ever how deep and how big around you want, and put the post in it. It'll be loose all the time and never settle. Dig the same kind of hole on the old of the moon, just the same size, and sink your post. It'll settle as tight as you could want - like it's took roots and grewed there."

My-freemate and I are living in a secluded mountain valley about 100 miles from Los Angeles. Our home — a truck-camper — is parked in an oak-pine forest, encircled by timbered peaks. At over-4000-foot elevation we are enjoying brisk autumn weather — mostly warm, sunny days and cool nights. In another month or so we will move to a low-desert site for the winter.

We have been squatting in this "National" forest — in the same spot — two months now, without permission and without trouble. About once a day the King's men patrol the one maintained road — it is several miles away from our site — their truck tearing along at double the safe speed with horn blasting — commanding any peasants to get out of their way, like feudal lords of old. Otherwise this "public" property is left mostly to us "public," believe it or not. Sometimes on weekends we hear shooting in the distance. The few hunters that we have encountered on trails have openly, nonchalantly said they were hunting for deer — the deer season is long past. And many a "Smoke Here" sign put up by the forest fuzz gets ripped down.

But we don't leave self-protection to chance or to the whims of "public servants." We select and prepare "squat-spots" with freedom-loving care. We prefer rolling wooded land that was once logged over for its numerous seldom-traveled trails and countless spots a free man can hide.

At our present site we are parked under two spreading live-oaks. These give adequate air cover without shading our south-facing solar-heating picture window. To our south aircraft can't fly low because of the mountains. On the ground, our camper can't be seen beyond 50 yards through the surrounding foliage. On our perimeter we added dead branches to some of the prickly scrub-oak bushes to make natural-looking obstructions which encourage the infrequent hiker to go around rather than through.

The last half-mile of driveway we purposely left in rough condition: it took us two hours to traverse it, creeping in low gear — worth it for us but not for the week-ender or forest fuzz. A small station wagon which we use to visit the city is parked beyond the rough stretch; we hike in from there. Hiking trails, both for access and fetching water (we carry ten gallons about every other day from a creek 200-yards away) are separate from the driveway to minimize wear on the latter. On both vehicular and foot trails we "arrange" intersections so that the more discernible and attractive forks lead away from our site. Sprinkling a few more oak leaves or pine needles (where these are the ground cover) does wonders to reduce signs of use. We find that with practice our protection measures become largely automatic and require little more thought than keeping one's hand out of a fire.

I commute to work in Los Angeles about every other week. I sleep there in the station wagon, parked behind my place of work. I work as an independent contractor with no taxes withheld: I offer my client a lower rate in return for cash payment and flexible working hours.

Since I find it fairly easy to earn money I have continued to do so. But as we grow more skillful in nomadic/wilderness living we find we can live well on less and less money. We pay no rent and we travel relatively little (contrary to the average "serf's" idea of nomadic living). We eat what we forage plus bulk-purchased staples (currently wheat, brown rice, popcorn, soy grits, soy beans, lentils, powdered milk, vegetable oil, yeast, alfalfa seed (which we sprout), vitamin C and E tablets, and honey). We buy few clothes and these are wash-and-wear. Occasionally when in Los Angeles we indulge in food and

Dear People,

We have just got your January Edition of the *Whole Earth Catalog* . . . And we were very surprised to see that you had reprinted our article on Sanitation published in the No. 8 of the *Fountain of Light* (November Issue) . . . And very pleased, too. . . .

On another page you had a picture of *Baba Ram Dass* in New-Mexico. By the way the sanitation article was done by Steve DURKEE of the *Lama Foundation* (where *Baba Ram Dass* was staying when he was in New-Mexico).

I am sending you a (almost) complete collection of the former issues of the *Fountain of Light*, hoping that you might even give us precious information about the way we could increase our circulation; for this is still the great problem that the paper has to face. . . .

PEACE,

Roger THOMAS/ The Editor of the *Fountain of Light* Will JENNINGS

46

The *Fountain of Light*, \$3/year (monthly); \$1.50/6 months from: Rainbow Publications (a division of Lorien Corp.) P.O. Box 190 Arroyo Seco, New Mexico 87514

Subsidizing destruction

In two areas, air and water pollution, a moment's reflection should convince anybody that the market, as now set up, is rigged against the environment. A hundred and fifty years ago it was almost unimaginable that clean water, much less clean air, could become scarce in the U. S. economy. Rightly, these resources were then considered common property and used without charge. The price of everything else the economy uses—land, minerals, food, labor, time—became dearer. But clean air and water, though now precious, are still left out of the pricing system, still free of charge.

Because the market has failed to keep pace with changing economic reality, the pricing system, expressing relative demand and supply, works against the conservation of clean air and water. A manufacturer is under great pressure to offset rising labor and material costs by developing new techniques. He has been under no comparable pressure with respect to clean air and water. Not surprisingly, techniques for conserving these resources have developed very slowly. The effect of omitting free resources from the pricing system is to make the economy as a whole pay a huge subsidy to those activities that put above average pressure on free resources. In short, we are now providing a huge, unintentional market incentive to pollution.

The most direct and logical way of getting clean air and water into the market system is by a federal tax graduated in respect to the quantity and undesirability of the pollutants. Such a tax, escalating over the first five or ten years so as not to destroy industries whose cost structures are based on the present system, would stimulate the development of antipollution techniques.

From "How to Think About the Environment," by Max Ways, in *Fortune*, February 1970. \$14/year (monthly) from: Time, Inc., 541 North Fairbanks Court, Chicago, Illinois 60611.

entertainment luxuries, but we enjoy these more as special treats. We stay out of status games.

Our range is not limited to Southern California. For two idyllic months this summer we camped in the wilderness of central British Columbia — exploring, hunting, studying, and just loafing. We were parked on a sunny hillside above a roaring creek, with snow-capped mountains for a backdrop. We feasted on saskatoon berries, red raspberries, squirrel stew, and an occasional grouse. One time a black bear visited us; another time a cow and calf moose wandered by, but not having an easy way to preserve so much meat in warm weather we let them be. We did not suffer from over-population: there were less than 100 people within a 50-mile radius.

We had no trouble crossing the border. When asked, we told the Canadian inquisitor that we were on vacation (giving fictitious place of employment) and would be visiting friends in Vancouver for a couple of weeks. We heard later that tourists who did not state a definite destination were turned back by the border guards because of the many forest fires.

Our rig consists of a medium-large chassis-mount camper on a one-ton open-frame truck. Dual rear wheels, with front and rear wheels identical, eliminate need for a spare tire. The transmission is a four-speed manual with a LOW low speed. With 70% of the weight on the rear wheels, in first gear we can crawl into places otherwise accessible only with four-wheel drive. Even though the camper has full stand-up height and plenty of air resistance, we get 10 to 11 miles per gallon by limiting our cruising speed to 50 or 55 mph (we seldom need go faster). I have installed an extra gas tank, providing 55 gallons total capacity.

Present furnishings, many of which we installed ourselves, include stove with oven, instant hot-water heater, and floor furnace (all operating off bottled propane), a "demand" electric water pump and a 15-gallon water tank, shower, waste-water holding tank, separate 12-volt and 120-volt lights, a second battery and selection switch, and a surplus 24vdc-to-120vac converter which operates off both batteries in series. An ice-box came with the camper but this gets used for ordinary storage; with dry staples we don't need ice. For a head we use the great outdoors when there; in the city we use jars and plastic bags — simpler, lighter, easier to dispose of, and MUCH less expensive than any flush system. On the rear of the camper I added under-chassis storage compartments plus a combination bumper/trailer hitch/motorcycle mount. We use the trail bike for scouting and local errands.

While our California squat-spots would be secure in most "emergencies," we believe in extra "disaster insurance": well-hidden alternate identification, gasoline stores sufficient to take us to a far-off wilderness of our choice, a supply cache waiting for us there, and thorough familiarity with a certain unpopulated stretch of American-Canadian border.

from: *Innovator*, Autumn, 1969 (*Innovator* is now *Efficacy*). Box 34718, Los Angeles, CA 90034. \$2.00/year; \$3.75/two years. See page 8, this issue of \$1 Catalog).

We have become aware of the possibility of rearranging the entire human environment as a work of art, as a teaching machine designed to maximize perception and to make everyday learning a process of discovery. . . .
Marshall McLuhan

You know, kids really like to learn: we just don't like being pushed around.
Anne, age 11

Better courses, better curricula, better coverage, better teaching machines, will never resolve our dilemma in a basic way. Only persons, acting like persons in their relationships with their students can even begin to make a dent on this most urgent problem of modern education.
Carl R. Rogers

A teacher is someone who listens.

But for all your stimulation and guidance the creative impulse towards growth comes from within, and is intensely characteristic of the individual. Education is the guidance of the individual towards a comprehension of the art of life; and by the art of life I mean the most complete achievement of varied activity expressing the potentialities of that living creature in the face of its actual environment.
A. N. Whitehead
The Aims of Education

Find out what the children are wondering and wonder it.

Teachers will allow kids to be as alive as they are and no more . . . no more!
Peter Marin

In order to make man free we must first understand what man is. And at St. Pa-De Vence, a schoolmaster who once replaced a code of blind obedience for seven-year-old pupils by appealing to their friendship, received two direct results. The children's painting and writing became as original and lively as possible and the villagers stoned his windows.
Nelson Algren

Childhood is not a purgatory or a basic training camp for the future hell or heaven of adulthood. Childhood has its own special beautiful qualities, which unfortunately, are reared systematically beginning with the first hour of the first day of kindergarten. The possibility for creativity, for imagination, for wonderment, is methodically drilled out of the child by false regards for obedience, measurable answers, and standard responses to standard stimuli. And then the day comes when we congratulate ourselves for our educational efficiency and excellence by citing statistics that 96.2% of our high school graduates enter colleges, as if entering college as a reward for 12 or 13 precious years robbed from our children's lives.
Grant Beglarian

I hear and I forget
I see and I remember
I do and I understand.

Old Chinese Proverb

Where is the Life we have lost in living?
Where is the Wisdom we have lost in Knowledge?
Where is the Knowledge we have lost in information?
"The Rock"
T. S. Eliot

If a man ain't busy being born, he's a-busy dyin' . . .
Ballad of Easy Rider

Education means "to lead out."

The difference between training and teaching is that if you know what you're doing its training and if you don't know what you're doing, its teaching.
B. F. Skinner

These quotes were supplied by Martin Engel.

The people in the institutions learn the functions prescribed for them. The tragic thing that happens is that they seem to lose their humanity as they become more efficient as vice-principals, as curriculum coordinators, as English teachers.
Media and Methods
Frank McLaughlin

A class is where kids learn from each other.

The "age of schooling" began about two hundred years ago. Gradually the idea grew that schooling was a necessary means of becoming a useful member of society. It is the task of this generation to bury that myth.
Ivan Illich

One of the reasons mature people stop learning is that they become less and less willing to risk failure.
John W. Gardner

Western Man has purchased prosperity at the cost of a staggering impoverishment of the vital elements of his life. These elements are festivity—the capacity for genuine revelry and joyous celebration; and fantasy—the faculty for envisioning radically alternative life situations.
Harvey Cox

FURTHER CORRECTIONS . . .

p.38

Windmills

One of the sources listed has a new address:

Aeromotor
Braden Industries
2225 West Curtis
Downer's Grove, Illinois 60615

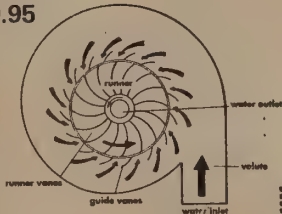
p.40

The Way Things Work

Price is up from \$8.95 to \$9.95

from:
Simon & Schuster
630 Fifth Avenue
New York, N. Y. 10020

or WHOLE EARTH CATALOG

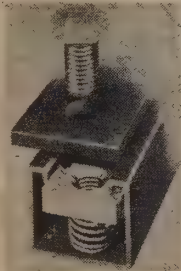


p.48

Unistrut

We mentioned the AIM brand of "metal lumber" as being available from the Acme Steel Co. The company has changed to Interlake. They don't sell direct but a list of their distributors is available from:

Tom Jackson
Interlake
4903 Pacific Blvd.
Los Angeles, CA



p.53

Gem Guild

Gem Guild has asked to be de-listed as they've sent out lots of their catalogs to our readers, at a mailing cost of \$.60 each; and haven't gotten enough orders from them to justify the expense. Too bad.

p.81

Wildcrafters

Wildcrafters World is \$1.00 for each issue, rather than \$1.00 a year; it's not a subscription magazine

Homesteaders and Landcrafters Newsletter is \$.35 a copy, or \$2.00 for six consecutive issues,

"not necessarily a year. If I put 8 copies out during the year, then the rate is still \$2.00, but if I can't put out even 6 a year, then the subscription runs on until all six are published."

from:
Wildcrafters Publications
R. R. 3, Box 118
Rockville, Indiana 47872

p.86

Preparation for Childbearing

No longer "free or cheap"; it's \$1.00

from:
Maternity Center Association
48 East 92nd Street
New York, N. Y. 10028

They'll also send a list of their other leaflets, booklets, books and charts for the asking.

p.112

Cuisenaire Rods

New address:

Cuisenaire Co. of America, Inc.
12 Church Street
New Rochelle, N. Y. 10805

p.116

New Schools Exchange

New Schools Exchange Newsletter, listed as \$1.00/month (or if need be, free), is now \$10 for twelve months, minimum subscription of \$5 for five months, but they ask that you subscribe for the entire year.

from:
New Schools Exchange
2940 Hidden Valley Lane
Santa Barbara, CA 93193

Dymaxion Sky-Ocean World Map Kit

\$1.95 for the punch-out kit

from:
Creative Education Society, Inc.
515 North Front Street
Monkato, Minnesota 56001

or WHOLE EARTH CATALOG

The shiny flat maps are \$4, or \$3 to students.

from:
Fuller Dymaxion Airocean World
Box 909
Carbondale, Illinois 62901

or WHOLE EARTH CATALOG



\$4.00 postpaid

from:
WHOLE EARTH CATALOG

Meccano

Meccano is made far more useful through G. M. Morris, 248 Woolwich Road, Abbey Wood, London SE2, England. He publishes various indexes of the (vast) Meccano literature, edits a quarterly magazine, and provides photocopied access to all the Meccano plans, manuals and magazines of the past 1/2 century.

Brian Williams
Aurora, Ontario

Merck Manual

If you order The Manual from Merck, you'll get a reply something like this one:

Your cash order for The Merck Manual and The Merck Index is gratefully acknowledged. While we are glad to fill that portion of your request asking for the Merck Index, distribution of The Merck Manual is limited to the physician and his professional colleagues.

In order not to retain your payment unnecessarily, we are sending you our check for \$7.50. If you are professionally affiliated, please let us know, returning our check to us, and we will be glad to fill your order for The Merck Manual.

Yours very truly,
John Lawson
Publications Business Manager
Merck & Co., Inc.
Rahway, N. J. 07065

[or, quietly, WHOLE EARTH CATALOG]

Remarks on Ashby

RE: Chis Smith's letter, January Supplement p. 42

I must rally to the defense of a valuable information source: W. Ross Ashby. *Design for a Brain* may not satisfy those who seek physiological correlates of behavior but it is an excellent formulation of a very general adaptive system. It could also be called *Design for an Ecosystem*. I highly recommend, not only that you retain the listing, but that you add Ashby's *Introduction to Cybernetics*.

Ashby understands general systems & cybernetics and does a great job in careful explanation. *Intro. to Cybernetics* reviews all the math you need to understand the heavies like Shannon & Weaver.

General system theory is the new paradigm for understand ourselves scientifically. It will eventually provide for the synthesis of science and magical systems like astrology and the I Ching. Its very important to have a clear understanding of the basics, and Ashby is an excellent place to start.

An Introduction to Cybernetics by W. Ross Ashby. \$5.75 trade edition, or \$3.00 paper text edition. From Barnes & Noble, Inc., 105 Fifth Avenue, NY, NY 10003.

Love,
Ron Nigh
Palo Alto, CA

Hot Scandal Cooled

Dear Whole Earth People, March 9, 1970

CONFESSIONSVILLE!!! I'm Cadmium Red with embarrassment. But however painful I must admit a horrendous error.

The letter I sent you on the subject of Potter's wheels (which I never dreamed you would publish!!) contained a very grievous mistake on my part. I had confused Soldner's wheel with Randall's. Idiomatic I know, but I am of a younger generation of craftsmen, and sometimes the names of the older Idols, like Soldner, Randall, Toshiko, Grotell and the rest, get blended into one in my mind.

Tho—their pots never do. So there is really no excuse for my making that mistake over their wheels.

The fact is that I am totally unfamiliar with Soldner's wheel. It is undoubtedly as good or better than Schlanger said it was and in need of that good coverage.

Randall has been making wheels for years and it was his that I had in my head when I wrote that hysterical letter that you unfortunately published.

I am glad you published the jazz on the Klopfenstein—it really is a great wheel.

I've learned one thing from this episode. After living years in this society with the confidence that one's letters travelled the mails to be neatly filed in wastebaskets, "The times, they are a-changing", and the power of the pen can now return to haunt one.

Very apologetically,

Mary Ann Gehan
South Acworth, N. H.

c.c. Jeff Schlanger (I haven't the guts to send one to Soldner)
Son of a gun.

Think

We've been trying for ages to find out if IBM's house organ, *Think*, is generally available to folks. (It's referred to in the *World Game* item, p. 50, January \$1 Catalog.) One of our readers sent us this letter, which they sent him. We didn't see a copy of the enclosed card, but it seems like it's probably hard to get.

Thank you for your recent inquiry concerning THINK Magazine.

THINK is distributed without charge, and of necessity the volume of its distribution is limited. From time to time we are able to add new names to the mailing list, and if you care to fill out the enclosed card in full we will place your request on file.

We appreciate your interest in THINK.

Sincerely,
Frank Pardow
Circulation Manager
THINK Magazine
IBM
Armonk, N. Y. 10504

Negative Ion Generators

Our inquiry about where we could get a negative ion generator yielded the following suggested sources. We haven't had a chance to check these out yet. In response to all who asked why we wanted one—in a word, to get high.

Negative/Positive Ions info
Electrogen Industries, Inc.
Westbury, N. Y.
Sanitanion
Abel ARC Bldg.
Buckland Street
Alexandria NSW Australia
Nucleonic Industries
2255 E. Aviation Highway
Tucson, Ariz. 87513—\$79.95

or stand by your local Xerox machine.

More on Fish Protein

Dear folks:

A reply to reader Don Symons (January, p. 46).

Fish protein concentrate has a long and dismal history. It was invented by an elderly, idealistic scientist, Dr. Ezra Levin of the VioBin Corporation, Monticello, Illinois, who thought he had a handle on curing the protein deficiency problems of the world.

FPC uses trash fish, entrails and all. After a patented process of chemical washings, the product is a gray odorless tasteless powder that lasts forever without refrigeration, contains a very high percentage of animal protein, and is cheap cheap cheap compared to the protein equivalent price of beef, say.

Unfortunately, an unholy combination of Dr. George Larrick, then (1965) administrator of the Food and Drug Administration; Hoard's Dairyman and other milk producers interests; and midwest wheat growers, fearing its use as an additive to breads, etc. branded the stuff "filthy" and unfit for an FDA identity standard. Four years of political battles followed, involving the National Science Foundation (or Academy of Sciences), Bureau of Commercial Fisheries, Interior Secretary Udall, etc.

I think the Catalog is great. I may be the only right wing nut who thinks so. Up here I am viewed as sort of a combination Paul Goodman and Max Rafferty, if you can figure that one out.

Yours,

Rep. John McClaughry
Jeffersonian Republican, circa 1790
House of Representatives
Montpelier, Vt.

Fish protein concentrate, once heralded as the big weapon in the war on hunger, remains an illusive dream despite the best efforts of Government and private business to produce it commercially.

About two months ago the Agency for International Development quietly canceled a \$900,000 contract with the Alpine Geophysical Corporation to produce 970 tons of the flour-like food additive for Biafra and Chile.

Contract penalties of \$6,000 a month were running against the producer when it proposed termination late in November.

The feasibility of commercial production of the odorless and tasteless additive made from whole fish and with a protein efficiency ratio of 80 per cent had been demonstrated in the laboratory of the Interior Department's Bureau of Commercial Fisheries at Beltsville, Md., about five years ago.

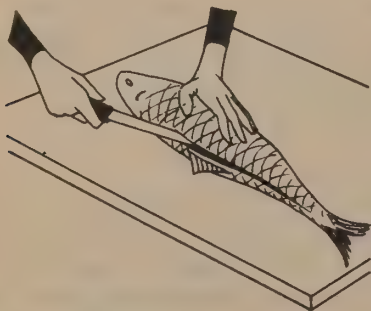
But bad weather and worse luck plagued Alpine from the contract signing in the fall of 1968 until its termination. Severe winter storms throughout New England delayed the delivery and installation of new equipment at the New Bedford, Mass., plant for three months.

A short harvest of Atlantic hake and hake-like fish then pushed up the price of the raw product to double the level expected. Finally, much of the ultimate product did not measure up to the standard set in the contract specifications. By that time it was Nov. 1, after which hake is not available.

Still, Alpine is not thinking of giving up. It hopes eventually to realize something from its \$3-million investment. With the aid of Federal and university scientists the company is now trying to discover what went wrong with its process. Only 70 of the 265 tons of the concentrate inspected could pass the test of contract standards for protein efficiency.

The New Bedford plant was closed a month ago but will reopen Feb. 1. By that time Alpine hopes to have a solution to the problem of lack of uniformity in the separate batches produced by the same process.

from:
The New York Times, Jan. 15, 1970
sent in by Herb French



Gasp, Splutter

About the subscription. . . . In view of information that I have acquired recently, I am not going to take on anything that requires a subscription that comes from the U. S. West Coast. I would strongly urge you to move inland as soon as possible and no later than 1972. You will, of course, get some indication of what I am writing about when heavy earth tremors strike California around the first few months of 1970. But the serious disaster which almost wipes out your State will be in about 2 years. In resettling look to the geological formation called the "Canadian Shield" which extends down from Canada to the mid-west and reaches Chicago. There are other places, true, but in any case stay away from sea or lake level areas.

Best of luck,
Burt Kaufman
Sydney, Australia

Vision, With Rap

I like your collective prose and the selections, under-the-skin communication. So therefore I feel called upon to criticize, no matter what your reasons for stopping publication, even of the most personal sort! I'm a new convert, and we are the crankiest!

Anyway, here are my suggestions. The catalogue and the truck store, truly beautiful in their concepts of space-mind preparations, stop short. There are other tools beside books. We do need to arm ourselves with knowledge and a clear mind to perceive, among other things the applications of knowledge. But reading is a limited way to understanding. When I came to the truck store, impatient to get there, I'd expected to find *tools*, models, materials, a community making a new design for Stores, that is—Information Centers, a place where you launch a new beginnings from. I would've like to see displays such as macrame and weaving, wind generators, plus having the wind generator working and producing, what? maybe lights and color machines, or tape music, or better yet, if we are speaking of new communities, running a motorized pump, that someone there has devised, with only available materials and his imagination. And so on. I suppose you'd need more room, but that might be exciting too! Could you go a bit farther out, close enough to urban centers, but still on the land itself, could the shape of the store change often—could people design, out of cheap materials, or plentiful materials, a changing line of Stores. I'd like to make a huge canvas shape, for instance, having it bulge and corner and dome where needed, held up by plastic rods, or aluminum poles—or another of scraps, driftwood and scrap metal. How about a small, shifting community, as people moved outward on their spiral, others come in who were interested in the Whole Earth concept, and also in spending some time in devising needed tools for where the truck store was at, putting together solar water heaters, hand made cowboy horse gear, (if of course you had horses!) organic gardens to feed this Whole Earth Truck Store Family. I think you have a lot of very committed people out here, who'd like to come together to really do things, solve common problems and learn. I think that this should happen in a real situation—there are many free university type courses, dealing well with theory and practices. I think a new book store could perhaps offer information in a more real way. That a small staff—or group—could work out many solutions to new communities, to ecology and survival. The customers to your store could really be involved in these solutions, checking them out, offering their own, would in fact, be as neighbors concerned with the success of problems solved, not just in theory. The catalogue could, if publishing were continued become more as the supplements, be indexes of real experience (as the story of Libre, and Gary's Four Changes).

Horse Freaks of the World . . .

As you may well realize, our planet is becoming foul. An answer, perhaps? Horses, manure is better than pollution.

I have noticed that many a freak has realized that the horse sometimes proves himself better than the car, and that since horses *can* be kept cheaper than a car, on the whole, they are really more economical.

As a horsewoman and a freak I am aware that many a freak doesn't have information at hand, and the books dealing with horses don't really go into the aspects of horses vs. the people that really appreciate the horse, more than the red neck thinks he does. Anyway, all the books you can find on the subject have a minimum requirement for owning horses; at least an annual income of \$9000 or more. But this isn't necessary. There are secrets one cannot find over night in owning horses, but, if anyone would like to try they are more than welcome to write me, and I am sure, if I can get it all together, I can help them take care of their horses on a minimum of \$5 a month, and have them take care of them well (a sick horse is no horse at all, remember.). To repeat, if anyone would like some enlightening answers to some puzzling questions concerning the freak and the horse, living compatibly together, do write.

Love,
Gail Lusk
P. O. Box 802
Idaho Springs, Colorado 80452

P. S. In case you have any doubts about my qualifications, I used to be a Texas red neck that rode barrel racing rodeo routes. Enough.

Skinny Dipping Patrols

Jemez, N. M. The U. S. Forest Service said yesterday its rangers have started "hippie patrols" to cut down on nude bathing in New Mexico National Forests.

The Forest Service said rangers on the routine patrols had been told not to be surprised at finding hippies "naked or engaged in mystic activities" that sometimes offend tourists camping in the forests.

United Press

I mentioned earlier my own feeling of diet imbalance, and I know that this is not your responsibility; there are groups out in the "wilderness" learning just how one digs a well. There are many more people getting ready to go out, and not quite knowing how. I suppose we will all find out when the need hits us, soon enough! I also feel you've done a lot. So much, in fact, that I would like to see you continue. If I haven't totally turned you off by my Virgo-Vision, perhaps we can get together some time and rap about dream theories.

Thank you for creating the Whole Earth,

Sincerely,
Ann Hatch
San Anselmo, CA

I'm impressed with these ideas and moved by the vision. I expect it's not all that individual a vision, either; many of our readers and customers may have felt vague rumblings along these same lines, not to mention our own staff. We did rap with Ann—no indication yet whether she'll go any further with it. We can't do anything to actuate or realize this particular vision, beautiful as it is, and still continue the trip we're into at the Truck Store, which has its own dictates (time, energy, direction, money, space), its own pace, meaning, goals, joys, frustrations, tiresomeness, challenge and beauty. By the same token, there's nothing that would turn us on more than to see it happen. A lot of times, when people say, why don't you do such & such, we say hey that's a groovy idea, why don't you do it? We're doing our ideas and even that seems a bit much to tackle at times. I dunno, it's always seemed to me that one of the main things the CATALOG says is do it yourself, man. We dig most of the criticisms we get very much, whether or not we make changes around them. What I don't dig is the underlying feeling I sometimes get that we're being asked to do stuff that belongs by its very nature to the head that thought it up, to do it. It would be so much better ecology if some of the mental energy that gets directed toward us were directed instead towards the real and physical realization of the ideas. A lot of visions don't ever get out of the head, and that can be a waste. Some get as far as being down on paper, and that's a beginning. Only! Or get stopped after they've been rapped about, because there's a false sense that something has happened. And again, we really don't mind having visions laid on us. But I, for one, keep wishing folks would realize that we may dig it, encourage it, feed it however we can, but in approximately ten cases out of ten we aren't going to DO it. So, all you visionaries, consider, instead, laying it on your own self, and you might find out whether it's just a trip, or an idea worth realizing in your own life. I understand more and more why our collective failures so outnumber our successes. It's just very much damned harder to succeed and take the responsibility of that position. Who'll do this one?

Ham Radio

My complements for the nice work you people are doing. Once or twice ham radio has crept into your pages. It is about this that causes me to put in my two cents.

As you have said in "Peradam" possibly in January ham radio operators only tell each other their equipment & exchange weather reports. Too true. However there are a few good heads about. In talking to .001% of the hams I find good together people.

This all leads me to offer my services as a ham radio operator to help anyone truly interested in using the wireless privileges guaranteed the citizens as one of those good ole' unalienable rights. I envision a true underground network. Maybe the resistance would be interested in using radio sets to form nets which would report underground news. The Free press, the free wire services might use ham radio for information dispatching. It's a free hobby in the various ways it is used by its members. I'm getting tired rapping out weather reports to morons. The range of radios is easily round the world. We could begin a world conspiracy. Freaks would dig rapping to their friends.

I'd like to hear from anyone who is into this hobby or interested and may I also suggest for additional info people should write the American Radio Relay League, Newington, Connecticut, 06111. It's the big ham radio club in the sky and their livelihood depends on bringing in new blood to fill the ranks. They'll help with all the nitty gritty facts you got to know, and they'll tell you how to become one.

I hope that this might turn on a new media for us earth people. Thanks for taking the time.



Bill Levy
WA2RUD/Q
731 Limit Avenue
University City, Mo. 63130

I'm Not Surprised

AMERICANS ARE NOT FOR EATING—Even for cannibals, Americans are unfit for human consumption. Animals which have 7 parts for every million of DDT in their fatty tissues are judged in the United States to be unfit to eat. And it is now disclosed that the average American today has 12 parts a million of DDT in his body.

—Manchester Guardian

Reprinted from *Backwoods Journal*, Paradox, New York, 12858.
\$3.00/year (bimonthly).

Adobe was a new material to work with. It was used for chinking and the fireplace. Its mixture was earth, straw and water. Everyone including my daughter could help with the adobing. The guys hauled rocks from near and far. Four hundred rocks in a jig saw puzzle had to fit tight without the adobe. The adobe for the fireplace did not have straw and was stuffed into the cracks. Snow was threatening for the seventh time and I was expecting in a month. A full stone chimney would have taken too long. They rocked in a chimney to the edge of the roof. They then got four pieces of stove pipe and took them apart and put two pieces together to make the funnel twice as large. They were held together by rivets. They found a metal earth drag and cut a hole in the top and put it on the rock chimney. Then the stove pipes were riveted to the piece of metal. An empty fifty pound lard can served as a revolving draft control.

The final projects were done inside. A wood stove had been given to us by a local family. Two sleeping lofts were built and a bunk for my daughter. Our great Christmas present was moving in before a lasting snow from middle Dec. to late Jan.

The total cost of the cabin was \$14. Even cheaper than Thoreau's cabin that cost \$28. It took two and a half weeks to build our new home. We felt very wealthy in many ways so we traded our tipi so others could also feel comfortable. There were three cabins on the land now all totally individual.

Now it was time to sit back, relax, create and wait. We had decided to deliver the baby ourselves. Midwifery is a dying profession and in these parts most mid-wives only speak Spanish and are very old. You have to pick them up and since we had no transportation, that would be impossible. I went in for an examination to the local clinic. They couldn't find my veins, my blood pressure and most suspiciously the fetal heart beat. This seemed strange because when I was in the hospital in Taos they also had difficulty finding the fetal heart beat. Also when ever my daughter and I would make a wish, I would wish for a healthy baby. We never listen enough to our intuition.

My water broke on a night we were invaded by ten people interested in the land. Luckily they had a car and children. So my daughter tripped off with them. We had all the necessary items ready—hot water, lots of towels, sterile gloves, gauze, cotton, bacitracin ointment in liquid form for the baby's eyes, cradle clothes and some tetracyclin to prevent infection. It was a simple birth much easier than

Good Words on Goats

I recently read in your Fall 1969 issue the selection on goat husbandry (p. 35). I was surprised to see Mackenzie's book reviewed as it is the most expensive dairy goat book there is and since it is British it can be misleading with regard to units of measure (e.g. Imperial quarts) and other matters.

Also the sentence "Toggenburg on the doe's side as that's who determines milk production." could be very misleading. Genetically speaking the doe and the buck contribute equally to the milk producing capability of the offspring. Economically speaking if only one parent is to be a pure and/or registered animal it would be the buck. His services can be rented for \$5 or \$10 which is cheaper than feeding and housing him. Besides, he tends to have the characteristic "goaty" odor which will carry over into the doe's milk if he is around. The does do not have this odor and are very clean.

In buying dairy goats one should consider getting two because they are very social and like company. This improves the milk output in a synergistic manner and with breeding alternately at six month intervals one gets a year round supply of milk. A lone goat would tend to bleed and may disturb people. Dairy goats are great pets and very entertaining. It takes two of them though to have a butting contest. We made the mistake of playfully butting with one when she was small, but our shins soon regretted it when she got bigger. There was no anger on her part. She just thought everyone enjoyed butting. Dairy goats learn their names at about two months of age.

Useful pamphlets are:

- "Your Dairy Goat" University of California Public Service Office 140 Administration Bldg. University of California Davis, California 95616
"The Purina Goat Book" Ralston Purina Co. Checkerboard Square St. Louis, Missouri 63119

Many state agricultural extension services and the U. S. Dept. of Agriculture have similar information.

Information is also available from:

- American Dairy Goat Association P. O. Box 186 Spindale, North Carolina 28160
American Goat Society 1606 Colorado Street Manhattan, Kansas 66502

One might ask for a list of breeders in his area. Even if you do not buy a goat it is useful to know where the breeders are. Then you have a source of "goat blessings" to spread around the vegetable garden.

One can also write for a sample copy of:

- Dairy Goat Journal P. O. Box 836 Columbia, Missouri 65201

A number of useful American books on dairy goats exist. They are in some libraries or advertized in the Dairy Goat Journal.

One should check on zoning regulations in his area before buying goats.

Sincerely, Robert A. Burgess Los Angeles, CA

in the hospital. With each contraction I tightly held my husband's hand and drifted off into the conversation of the couple who had come to help. With a few blood curdling screams, the baby was out. I delivered the baby on my daughters bunk and practically crawled up the wall for bearing down. Breathing was essential. I had practiced both the LaMaz method of breathing and exercised during pregnancy. My husband and friend had been prepared by the doctor who owned the land on what to do. Not to cut the umbilical cord right away. Clean the baby's eyes out and not worry about the vernix caseosa. For it was most important to keep the baby warm. We had a roaring fire in the stove and fireplace. A Coleman lantern gave off so much light it almost blinded us. All seemed well; I felt great and was waiting to pass the afterbirth. My hus-

So What's Your Reason for Going to the Woods?

Dear Patriot:

The American dream became a nightmare when the outlaw governments of Washington and Moscow devised the Yalta plot to rule the world! The shame of Americans is their support of this Marxist-liberal deception!

No less deceived are the FBI, and the Committee on Un-American Activities who failed to stem the tide of subversion by concentrating on the Communist Party which exists solely as a decoy for the express purpose of diverting suspicion from the liberal conspirators in power!

To achieve their Marxist ambition, the liberals must erase the concept of God and morals from the mind of man! Hence, they assault the Constitution as the root source of moral and spiritual strength!

It gave rise to the criminally conceived Civil Rights, and War on Poverty programs of all out immorality! This is the ultimate in self destroying evil that dooms the liberals for the following reason:

There are only two methods by which the world can be ruled: One is by the God authored moral law that cements human relations in a free society of law and order. And the other is by immoral authoritarianism that binds the social order by means of brute force. And by undermining the already weakened moral order, the liberals will spring the trap for their own destruction and precipitate a world holocaust before they will have had time to set up their Marxist dictatorship! Time is short!

This falling apart of the world order is prophetically scheduled for March 31, 1966! All values will go into a tailspin March 24, 1966! A grievous tragedy in February, 1966, will forewarn America's fall!

The American continent will be shaken severely May 10, 1966!

Russia will hold 1 1/2 years longer prior to its total annihilation!

The deceived masses who supported Satanic liberalism will, to the last man, woman and child, die by the hand of the very enemy to whom they betrayed America, for the Russians will drop missiles, and then invade the U. S. in July, 1966, to wage their wholesale extermination!

This will mark God's perfect justice in the day of judgment!

SANCTUARY FOR CONSERVATIVES

The conservatives who could not be deceived, are now being warned and directed to the Bible designated sanctuary where they will be sustained and protected by God, and strengthened to gain the ultimate victory! It will be no less a miracle then the deliverance out of Egypt!

The following Bible excerpts give dates and locate the sanctuary:

"The mount of Olives" (Sec. 14.4), identifies the U.S. as a nation of peace. The rest of the verse shows it divided north and south by the Mason-Dixon Line, and east and west by the Continental Divide.

"And ye (conservatives) shall flee to the valley of the (Rocky) mountains" (Zec. 14.5), in response to my warning of the coming disaster for protection and survival. The verse continues:

"For the valley of the (Rocky) mountains shall reach unto Azal (separates)". This identifies the Continental Divide that "separates" the water flow east and west. It also emphasizes that San Luis "valley of the (Rocky) mountains shall reach unto Azal", or the Continental Divide, from its starting point at the base of Sangre De Cristo mts.

Sangre De Cristo (blood of Christ) mountains, identifies the United States as the nation of Christ, and the scene of his salvation!

Zec. 14.8, also locates the U.S. between "the former (eastern) sea" or the Atlantic . . . "and the hinder sea", or the Pacific.

666 is "the number of a man" (Re. 13.8) who is Adam, and identifies the 6000 year Adamic dispensation which ends in 1966 to make up 666.

The 6000 year period was to end in the year 2000, but time was shortened or "there should be no flesh saved" (Mat 24.22), due to the ever increasing danger of an all-out atomic war and total annihilation!

(Nostradamus' 12,143 days (c.3,q.56), extends from Jan 1,1933, to March 31, 1966, as the period of liberalism and treason in the U.S.)

FLLEE TO COLORADO

Beginning March 31, 1966, Christ, in his second coming, will be the "receiver" (Isa.33.18) of the conservatives in San Luis valley at Alamosa, and Salida in southwestern Colorado, as their awaited hope!

We will endure 3 years of severe hardship in the sanctuary (Isa. 37.30) before returning to normal life in a tax-free society of perpetual prosperity, launched by the conservatives as the "kingdom of God"!

Sleeping bags, axes for firewood, hunting, fishing, and camping equipment will be needed. In any event, God will see us through!

This warning must take fire throughout the conservative community!

Michael Rayes P. O. Box 447 Monte Vista, Colo. January 10, 1966

Reprinted from a weird weekly newspaper, name unknown.

DADU noticed the baby, dressing the baby I held him and realized that even with my warmth and many blankets our son was cold. As much as I hated to we called the local clinic from a neighbor's store, three miles away. We wanted to give our son every opportunity for life.

A doctor and a nurse came at dawn. What a farce. He had the wrong emergency bag, didn't know how to work the oxygen tent, insisted it would require an operation to pass the after-birth. So my husband, our baby and I went into the clinic twenty miles away. The doctor was annoyed and left a nurse in charge. I easily passed the after birth and my husband took care of the baby. He took a stethoscope and realized that breathing had stopped. As well as delivering his son he also made out his death certificate. We wanted to bury our son on the land nearby, so some red tape had to be dealt with. Luckily the visitors picked us up and we returned home.

An indian Friend stopped by that day. He told us not to worry and forget. We didn't want to forget; we were sad then but that was natural and soon we would be able to talk about the short life of our son. There are many beautiful things in a world of nature that can cure all sorts of wounds. We had much to be thankful for.

The snow melted—we tripped—and began to build and create. An outhouse was again dug and built. That was a great luxury. In between building the guys began to hike up some of the mountains. They could see for hundreds of miles. They made all sorts of discoveries about the area. The mountain would be a source of inspiration always. My daughter and I climbed to a small ridge and sat a long time listening to the winds.

When they came down they brought a new material for working, antler. They spent many hours making antler pipes, buttons and knife handles. My husband works with leather so after having made enough serviceable clothes for himself, he started to make things to sell. I got into making candles and ordered some pottery supplies. With hand made goods and our coming garden, we should be able to be self sufficient.

The summer I'm sure will bring an onslaught of people that can't be turned away. The land can only hold so many people and we do not want to bring a city condition to such a perfect setting. So we look to the hills for the future. Land with no roads to it where we can build a stone house and live again on a new frontier.

L.

Soviet Books; da

A thought. Soviet books; yes, written in Russian. One of the points the Soviets push with great and justifiable pride about their country is the easy accessibility of education—do-it-yourself or official—especially along certain lines, which includes beautiful detailed books about peasant architecture, graphic and detailed books about the medicinal and other helpful uses of wild plants, and so forth. Some of these are set up so you don't need to know Russian at all, and others a few minutes' work with a dictionary will give plenty of access to. They sell so cheap in the Soviet Union (part of making it accessible) that even with transport and markup, they are mostly tremendous bargains in the U.S.: You can get them from only a few bookstores in the U.S., among them Schoenhof's, Harvard Sq., Cambridge, Mass., 02138; Kamkin Inc., 1410 Columbia Rd., NW, Washington D.C. 20009; Four Continents Book Corp, 156 Fifth Ave., NY NY 10010; (and there's one in San Francisco, I think whose address I can't find at the moment. Also, through any one of these stores you can subscribe to a weekly service called Novye knigi SSSR [New Books of the USSR] (52 issues for \$2.00!) which announces in advance the books that are going to be published during the coming months. Knowing Russian helps in making sense out of this, but isn't absolutely necessary—all you have to do is learn a few key words.

The bookstores themselves will send out price lists (though these are generally not broken down so much into categories, so knowing Russian is more important), and are mostly pretty good about answering questions like: "do you have anything on . . . ?"

Similar service for other Eastern European countries can be obtained from FAM Book Service, 69 Fifth Ave., Suite 8F, New York, NY 10003.

Hugh Olmsted Brooktondale, NY

More New Schools

I'm director of the Teacher Drop-Out Center here at the School of Education, University of Massachusetts. We're a clearinghouse of information on and a specialized placement service for free, innovative, community, alternative schools around the country. People write to us, tell us who they are, where they're at & where they're at about education and we try to help them. (We've got a list of such schools that we are in contact with and a continuing list of job openings.) If you can, would, I'd appreciate a mention in your magazine. Our group is also interested in helping people set up alternative schools.

Peace,

Len Solo

Home address: 368B Laurel Ridge Apts. Hatfield Street Northampton, Mass. 01060

Japanese Saws

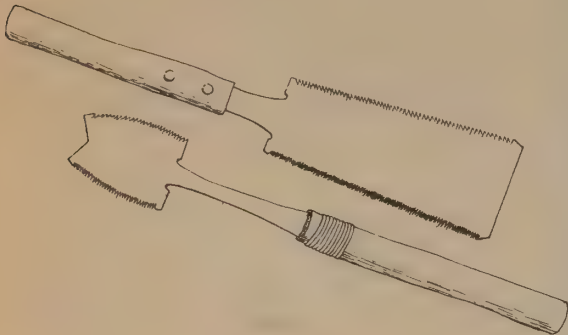
Traditional Japanese saws have a variety of forms to facilitate their elegant joinery. But all cut on the pull stroke using two hands (foot holds wood). Many are double-edged, one rip and one cross-cut. They are light, thin, precise, and tireless.

To use a typical western saw after trying one of these is to induce nightmares of two-hundred pound marines hopping through rice paddies on one foot.

Can you help locate a source of Japanese tools for those who like to walk quietly through the woods?

Ken Freidus
Warren, Maine

P. S. I think there is an importer in Seattle.



Invitation to Craftsmen

Dear Friends,

We're a small new community house, trying to build a place where people—local and otherwise—can feel good about getting together. Nothing very radical at this point, but perhaps a beginning.

There just aren't working craftsmen here, or people really interested in experimenting with new kinds of relating in any number, so I am determined to try to get some to come! The enclosed flier will tell you of our plans for the summer.

This is a very conservative area, but the scenery's beautiful and a small group of us are interested in real community. We would appreciate your spreading the word down there.

If you're a craftsman—and you want
—a place to work
—a chance to share your skills
—to live with other craftsmen in the country

Would you be interested in sharing a large shop in an old church building that already has a bookstore
—for the summer
—or earlier
—or longer?

You can make things for sale, give demonstrations, teach kids.

We're planning a summer mime theater and a health-food restaurant too.

Clay, leather, weaving, clothes, graphics, beads, jewelry, sandals, music, ???

Peace,
Patricia Herron
The Growing World
100 Forbes Street
Lakeport, CA 95453

Commune List

Carleton Collective Communities Clearinghouse. Write Mike Druger, C.C.C.C., Carleton College, Northfield, Minn. 55057. A new service for the commune prospector, with an information file on communes seeking members.
—Strawberry Network

Water & Land

Another thing to think about. Any community must have water. The U. S. Geologic Survey publishes ground water surveys of many parts of the country, these include information on the availability of water, how deep it is and how much water can be expected.

Another service of the benevolent uncle is through the extension service of the various states. Usually with the Agriculture Dept. I know in N. J. they will send a representative to talk to you or supply information about soil analysis, plants, bugs, anything in that. Usually straight, but into the land and very helpful, good people.

Steve Schlossman

Light Dissent

Another objection:

On p. 27—Aladdin Kerosene Lamps.

"Coleman lamps are terrible—they hiss clank and blind you, just like civilization."

Fact is: when the man says they blind you, what he's really saying is that they put out a lot of light. In most circles this is considered a plus. The big drag is that the bright light attracts everything that flies, every moth and his cousin for a radius of a mile comes to circle around your lantern. Simple remedy: buy yourself an amber glass (just \$1.99 at big 5 sport stores). Softens the light, doesn't attract bugs—at least not too many.

Come to think of it, I guess Coleman lanterns, stoves, etc. deserve a praiseworthy word from you folks. I've owned the same gasoline lantern for at least 15 years, and going strong. I'm about to replace the stove—with another Coleman, but that's because I'm messy, and too lazy to clean it. It is interesting to note that other companies have marketed similar products in recent years, but have not at all improved upon the original design that Coleman has been selling. Also, Coleman sells replacement parts. You can buy a new generator pipe or valve, and get another 15 years of use out of a lantern or stove. This is unusual for an American co.

Bernard Altshuler
Los Angeles, CA

From Bindu to Ojas

From Bindu to Ojas, A COOKBOOK FOR PSYCHIC SPACE, IS BEING PUBLISHED BY THE LAMA FOUNDATION. IF YOU WOULD LIKE IT, PLEASE WRITE FOR INFORMATION TO

Lama Foundation
Cookbook Fund No. 2
Box 444
San Cristobal, N. M. 87564

Joe Bonner
San Cristobal, N. M.

Australian Dyes & Wools

Thank you for your letter of the 4th February. It is a pleasure to hear from fellow weavers in the United States. As requested, I would advise as follows:

Indigo	65¢ oz.
Ruby Cochineal (fine)	95¢ oz.
Carmine Cochineal	75¢ oz.
Madder	55¢ oz.
Weld	40¢ oz.
Walnut	40¢ oz.
Wattle Gum (Cutch)	30¢ oz.

The dyes are of the finest quality, and are supplied to the Smithsonian Institution in Washington, D.C., as well as to a number of universities in the U. S.

Wools	
Superfine Merino AAA 80's	\$2.00 lb.
Superfine Merino AAA 70's	\$1.80 lb.
Merino 64's	\$1.65 lb.

Merino 58's/60's XB)	
Merino 50's XB)	
Merino 46's XB)	
Border Leicester)	
Romney Marsh)	\$1.65 lb.
Cheviot)	
Natural coloured merino fleeces—black, brown, fawn, grey)	

Fine Black Merino (rare)	\$2.50 lb.
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Mohair	
Mohair AAV (Scoured)	\$2.50 lb.

Silks		
Fine Silk)	\$2.50 per skein of
Wild Silk)	2½-3 ounces.

The wools are the finest available in this country, and are those used by our own spinners. We are also able to send overseas the Princess Louise Spinning Wheel, should this be of interest to you. There are no importation formalities, and no duty is charged on private consignments such as these. Our banks are able to accept personal cheques drawn on American banks, provided that 25¢ exchange is added. The postal rates are: Small packets: 6¢ for each two ounces or part thereof; Parcels: (up to 2 lbs.) \$1.35; (up to 7 lbs.) \$3.50; (up to 16 lbs.) \$6.60.

I trust that I have been of some assistance to you. Should you require further information, please do not hesitate in writing to me.

I have the honour to remain, Madam,

yours sincerely,
C. D. FitzHardinge Bailey,
Handweavers' & Spinners'
Guild of Australia,
St. Aubyn,
15 Dutton Street,
Bankstown, N.S.W. 2200
Australia

Creative Ecology

Fleming Bottle and Jug Cutter
Approximately \$7.00 from Fleming Bottle and Jug Cutter, 2110 S.W. 173rd Place, Seattle, Washington 98166

This is a true tool. No deposit bottles become utensils and worthwhile objects. See review.

Kit includes—glass cutter, frame for cutting bottles, glass breakers (2), emery paper and detailed illustrated instructions.

My girlfriend and I were in Washington State in January. In a hobby store we noticed the bottle cutter and a display of some cut bottles. We were jazzed but broke. As soon as we came back and found no one had ever heard of it we decided we wanted it so we sent for it.

The bottle cutter makes a practical tool. By following the instructions and with some practice anyone can turn out interesting glasses, mugs and vases. The kit will cut anything from an eight ounce bottle to a 5 gallon jug. We don't even take back bottles with deposits anymore. Wine bottles make interesting pilseners. Beer bottles make excellent glasses in sets of six, plus you get to drink the beer. We've given them as wedding presents and people really dig them. If you hate the thought of all that wasted glass like I do, you'll write to Floyd Fleming. His instructions are personable and informative. Peace.

Pat Milberry
San Jose, CA

Clouds and Fog to Order

We thought you might be interested in knowing about our company, which makes clouds.

Thomas R. Mee
Mee Industries, Inc.
Altadena, CA

Clouds, fog and mists have many applications in display, decoration, advertising and special effects. Mee Industries can produce these phenomena in size, quantity and even color to meet your requirements.

This firm of cloud physicists has made some major breakthroughs in cloud generation so that these special effects can now be tailored to meet your requirements. One exclusive Mee Industry capability is the generation of real cloud or fog banks from pure water. This can be used to advantage where chemical additives are undesirable.

One of these "natural" clouds will grace the dome of the spectacular Pepsi-Cola pavilion at the Expo '70 Fair at Osaka. Other interesting Mee Industry capabilities include stabilization of natural fog by seeding with hygroscopic nuclei and fog making by chemical means.

Mee Industries will work with your designers, engineers and contractors to put clouds to work for you. Call for a quotation on any job with a cloud in its future.

Mailing Address: Post Office Box 365, Altadena, California 91001
Phone (213) 794-2577



NASA Films

Thought you might be interested in NASA's catalog of films. They loan the films for free and as I understand it they even pay postage both ways.

The films I've seen have been really good, especially the actual space footage and the old newsreels of Jean Piccard in his goddamn helium balloon gondolas. The ones about space suits are interesting but nearly as incredible as rocket separation seen looking back from the capsule.

Dave Stoms
Houston, Texas

Catalog free from:
NASA Manned Spacecraft Center
Photographic Technology Laboratory
Audiovisual Branch—BL6
Houston, Texas 77058
Telephone 488-5100 (Area Code 713)

Films Available for Loan

All films are 16mm. sound, color productions. There is no rental or service charge for NASA Manned Spacecraft Center Films. No admission may be charged for viewing the films. Films are loaned for group viewings. Because of legal and financial responsibilities involved, films cannot be loaned to minors.

Films may be shown for non-sponsored public affairs and sustained telecasts.

To expedite the shipment of the film, requester should give his name, address, zip code, organization, and the preferred and alternate dates for showings

Navigation

Primer of Navigation, by George Mixter. \$12.50 from Van Nostrand-Reinhold, 450 W. 33rd St., NY, NY 10001

The clearest, best written, most concise treatise I know of is this one. Mixter, who was the president of Pierce-Arrow, of all things, seems to be the first to have taken navigation from the area of an occult art—scattered and hidden in separate, virtually unreadable tomes, accessible only to the obviously small numbers of initiates.

C. Pitt
Urbana, Illinois

Underground Stable

HELPFUL HINTS FOR HOMESTEADERS

—Buckskin Jake—

Underground Stable—When I was young I remember being in some stables under the barn and they were very warm. Also, I remember reading about a man who lived in Dakota territory in the early days. He worked on ranches in summer and helped cut and stack wild hay; in winter he trapped in the Black Hills. He said it only took half as much to feed a horse in an underground stable as it did to feed one in a stable on top of the ground.

To make the stable, dig out a hole on the east or south side of a hill so it will get the winter sun. It should be about 4 feet deep at the deep end. Make it big enough to build your log barn in the hole. After you get the barn done, fill the dirt back in the hole against the logs up to the ground level—one side will have dirt against it to a height of 4 ft., at the two ends the dirt will slant back to nothing, and the southerly side will be free of dirt. Here is where you make the door and window.

Snow, when it gets deep around a building, helps to keep out the wind, but sometimes we have a lot of cold and wind before the snow gets deep. Be sure the barn is protected from the northwest wind so it won't drift under. I have seen snow 15 ft. deep on the east side of hills.

If you have goats or sheep, let the bedding get a foot or more thick in their pen. This will start to heat and make the barn warm in case you have any young born in winter. Also, an underground stable is a good place to winter a pig if you keep one. A cow or a donkey has well insulated hair to keep him warm, but a pig has to depend on a layer of fat, and it takes a lot more feed to keep that fat on him in a cold barn.

Make the barn high enough so you will have 3 or 4 feet of space over the stable to fill with hay and you will have a snug stable. After a few years the dirt against the logs will rot them (tho they will last much longer if built of cedar or other rot resistant wood; painted with wood preservative before the dirt is put against them; or covered with black plastic sheeting where the dirt is to be placed), but in the meantime you can make a stable with a stone wall laid up as high as the dirt comes and finish with logs the rest of the way. This should last as long as you want a stable.

Backwoods Journal

But Will They Sell it to Us?

Hello

I noticed a suggestion recommending the Physician's Desk Reference for information about drugs. A drawback: P.D.R. lists products *only* if the pharmaceutical companies pay to have their drugs included. The result: paid advertising.

A finer tool—Facts and Comparisons, edited by Erwin K. Kastrop and Gene H. Schwach. For each drug it supplies composition, manufacturer, purpose, how-its-used, precautions, adverse reactions, how-it's-supplied, relationship to other products (similarities, differences), and "cost index".

Drugs arranged in large groups by use.

Another good thing: F&C is updated monthly. New pages in the mail (including alphabetical index supplement.) A boon to all anal retentives the thing is a ring notebook. Click click they even punch the holes for you and tell you (straightfacedly?) to replace old page 15 with new page 15.

In 1967 it cost \$11.00 per year. But you never know. Ask

Facts and Comparisons, Inc.
333 Chambers Road
St. Louis, Missouri 63137

Caren Quay

Pottery Books

Dear Whole Earth People:

Joe Bonner asks about good books on firing clay—

The best are 3 by Dan Rhodes:

1. *Clay & Glazes for the Potter*
2. *Stoneware & Porcelain*
3. *Kilns*

all published by Chilton Pub. Co, 401 Walnut St., Philadelphia, Pa, 19106. Each about \$7.50.

Kilns especially is terrific, as it is the only really comprehensive book on the subject, full of illustrations, info on where to buy materials, and the quality of those materials.

Deborah Shapiro
Pomona, N. Y.

George E. Thompson seconds these and adds *Ceramics: Potters Handbook*, by Glenn Nelson. \$6.95 paper from Holt, Rinehart & Winston, 383 Madison Avenue, New York, N. Y. 10017

Meditation

I can no longer resist my long-standing intention to recommend transcendental meditation to *The Whole Earth Catalogue*. Available throughout the world from S.I.M.S., S.R.M., and I.M.S. centers, the technique is easy to practice and can be learned by anyone. Using the natural tendency of the mind to experience increasingly subtle states of perception in two brief daily meditations, the technique effectively cultivates all areas dealt with by various methods of yoga and meditation. Anyone interested in systematically raising his level of consciousness and thereby realizing his full potential in all aspects of life should experience it: if you want to meditate, this is how. Information and addresses of local centers are available from S.I.M.S., 1015 Gayley Avenue, Los Angeles, California.

I have recently seen a draft of a scientific paper, "physiological effects of transcendental meditation," by Keith Wallace. Based on extensive research, the paper is to appear in *Science Magazine* in the next month or so. It gives evidence that even beginning meditators experience deeper metabolic rest in meditation than in any other state, including deep sleep. This and resulting benefits must be experienced to be appreciated.

I should also mention that Raii Kumar is publishing two sequels to *Tantra Art*, both also by Mukerjee, both, he claims, greatly superior to the original. The first, *Tantra Asana* will be out soon.

Sincerely,
Michael Cain
Rishikesh, India

Transits & Levels

A free booklet entitled "How to Use Transits and Levels for faster, more accurate building" is prepared by C. L. Berger & Sons, Inc. of Boston and can be obtained from Catalog Service, P.O. Box 1656, Dept. 88, Richmond, Va. 23213. One is to ask for the above named booklet. My first concern was whether it would be written in language for the non-technical reader and I was pleased to find it prepared in an elementary method with few assumptions taken concerning the reader.

101 uses for a transit and level are given and a select few are exemplified. It illustrates the method of squaring foundations and establishing straight lines for numerous uses. Straight crop rows are laid out with a transit which doesn't sound like a necessity but it can be helpful to the mule pulling the plow.

Wayne Wooten
Wilbar, N.C.

Handy Medical Guide for Seafarers

Is now in paperback. It was \$3.85; is now \$2.40

from:
Fishing News (Books) Ltd.
110 Fleet Street
London E.C. 4

or WHOLE EARTH CATALOG

Make Your Own Space Blanket

MATERIALS

- 1) Aluminum Foil, preferably quilted "Super" type; any convenient width
- 2) Mystik Tape or equivalent
- 3) 3-10 mil clear plastic or better
Clear on one side, black on the other

DIRECTIONS

"Tack-tape" foil together then tape on outside of sandwich & stitch down outside

Some uses for this thing

1. If like me you're used to sleeping on the hard ground it takes the place of an ensolite pad & air mattress (which is never worth the bother) or wrap it around you like a Christmas turkey (leave enough space on top for the bag to breathe)

Another VW Book

You have in your catalogue two very good books on VWs. *How to Keep Your VW Alive* is good for technique while Elfrink's *Technical Manual* supplies sometimes very helpful extra information. However if you happen to own a 1965 Sedan (like I do) or a later model you will find that the *Technical Manual* is confusing and not complete. The latest edition of this book was published in 1965.

I have a better one. It is called *The Volkswagen Owners Handbook of Maintenance and Repair*, published by Floyd Clymer. This is a very thorough book with up-to-date and easy to understand (and to locate) exploded diagrams, and pictures. I recommend it highly to anyone that owns a '65 Sedan or later as it has sections for '65's, '67's, '68's, and '69's.

Clymer publishes other books on VWs including one on 1600s, Transporters, Souping Up a VW, How to Drive and Road Test a VW, and even an old reprint of one of the first VW instruction books. Clymer also publishes books on many other foreign makes (Porsche, Datsun, Volvo).

Best Regards,
Steve Keleher
Van Nuys, CA

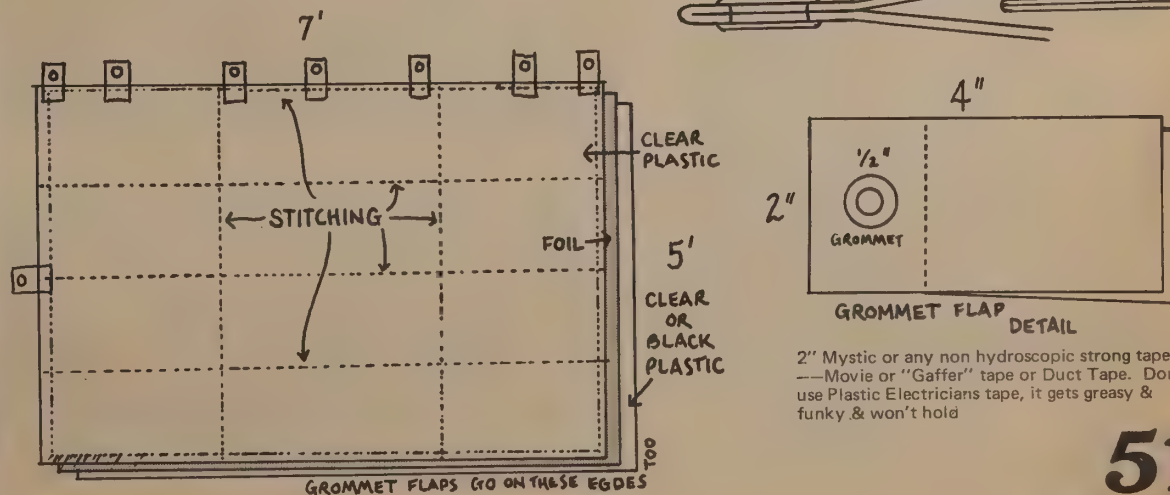
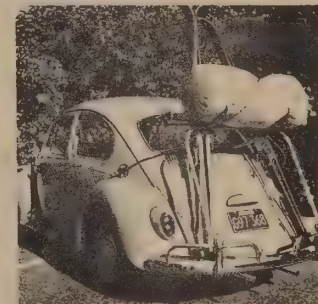
Volkswagen Owners Handbook of Maintenance and Repair \$3.00 from Floyd Clymer, 222 No. Virgil Avenue, Los Angeles, CA 90004

Volks-Rack

This Volks-Rack is what it says! It makes life a lot easier for us "bug" owners.

William G. Williams, Jr.
Lincoln, Massachusetts

R. A. Allen Co. Box 115, Lincoln, Mass. 01773
\$15.95 Postage Paid
Anywhere U.S.A.
Mass. Residents add 3% sales tax



Truck Store

We decided that "Gripe Page" was more limited than we really want to be here. So it's gripes, trips & ramblings, suggestions, & pretty much whatever folks have to say.

GRIPES

1. People who gripe & don't sign their name.
2. People who order books within Calif. and don't include the 5% sales tax. —Alan—
3. *OZiH+%&+@\$@ People who don't use their ZIP CODE. —Alan—
4. People who throw trash in Bernie's Box! —Bernie
5. People who gripe! —Jerry Fihn
6. People who make rules about signing gripes. —Les
7. People who send too much money for books.
" " " " not enough " " " " —Alan—
8. LET'S STOP TAKING EACH OTHER'S PENS —GEORGE
9. People whose orders are not crystal clear. —George
10. People who order subscriptions or issues. —George
11. Neo-Nazis & other "patriots" who send us their shitty rags & mags in the mail. —Peter

Introducing: Divine Right Davenport

Poor old Divine Right Davenport, somehow on one kind of dope and another he'd damaged himself, destroy'd his speech, got so he couldn't finish half of any sentence he started, just couldn't talk anymore, that's all.

Estelle didn't much mind, half a sentence was as good as a whole to her. After the kind of three months truck trip they'd been on together, their heads were so close, their private sign language so refined, she just filled in whatever blanks D. R. left and made as much sense as they had any immediate use for.

But there were other things than sense, other ways to be than sensible, and from time to time D. R. needed them. He needed to get off to himself, away from the truck, away from hitch-hikers, away from how Estelle was always finishing his sentences for him.

"After while, back," he muttered, and set out into the trees.

Walking tree dark downhill walking moon the trees first time long time, clumping along jolting body a long soft road through smells like these and sounds. Frogs, over there in the drainage. Frogs and dogs back on the hill-top somewhere. Up there an airplane, I reckon I'll rest a while, just sit myself down on a stump in this little circle of trees. You ought to of come here a long time ago D.R. It's easy to speak in all this quiet I hope to say anything I want to. Say grease. Say flats. Say rolling miles say speed say rolling forever the world outside the broken windshield. Just, say it, like that old frog croaking into his croak for pure fun. Speak into talk for fun, half a tongue flapping for exercise that might just heal it. Frogs speak. Dogs speak. Airplane speak down through this speaking circle of trees where I sit speaking. All of us here in the woods in the dark under the moon speaking whatever songs are native. Silence as the talker's premise, stillness as the dancer's. Shapely, shapely. Quiet in the face of it automatically talk a shapely song. Don't move, don't even ask what if silence is what you want to sing about. Don't even bring that up in front of these jealous trees, and don't interrupt frogs with questions, either. They don't want your old loves and deaths, your old lost fucks and funerals. No replays. No half-tongued solos. Yesterday's hit, this morning's flash, no more'n old browsings in courthouse files where parents are recorded, stacks of some aunt's letters from a sailor committed suicide. Forget it. Forget the truck. Forget what's her name. Turn out the lights on all those faces, make a dark out here without saying weary, without saying sleep, don't say the memory of a blanket either, filled with sun in an old back yard we may pass again some day if we travel long enough, maybe stop in to see who lives there now, see if they recognize a half-tongued freak with rings on his thumbs, half-words pouring out rusty cans and broken glass all over his shirt front all over these lovely trees oh man Jesus help me I got the verbal dry heaves. "Estelle!"



Delta Mist Is Here

Delta Mist arrived March 14, 1970. On March 14, 1990, she will be twenty years old. Maybe she'll find an old dog-eared copy of this issue of the Catalog in a trunk somewhere, and read it on that occasion. If so, hello Delta Mist in 1990! And hello to your mother Pam, who way back in '70 cooked lunch at the truck store, and to your father J.D., who became the new store manager, just a few days after you were born.

Frederick the Mouse

With all the books for children that have been suggested for the CATALOG, I can't figure out why nobody's mentioned *Frederick*. Frederick's a poet, artist, composer, mouse. Moral's the reverse of the grasshopper/ant story: us lazy creative folks are important, too. *Frederick*. Leo Lionni. \$3.50 from Pantheon Books, 457 Madison Avenue, NYC 10022

cappy



MEHER BABA

Canadian Whole Earth Almanac

Tracy and Barbara McCallum and Alan Burton are presently in the process of putting together a Canadian version of the Whole Earth truck store and catalog. Working with people in Toronto and elsewhere, the catalog will be entitled *The Canadian Whole Earth Almanac*, a non-profit organization and to be published this year in Toronto. The Almanac will contain CANADIAN sources for many of the items listed in the W.E.C., in addition to material particularly relevant to the Canadian consumer.

Any suggestions in regard to funding or ideas anyone might have in regard to access or tools and items that are similar to the ones carried in the W.E.C. but available in Canada would be very welcome and gratefully perused. Suggestions and ideas should be sent to:

CANADIAN WHOLE EARTH ALMANAC
Whole Earth Truck Store and Catalog
558 Santa Cruz Avenue
Menlo Park, CA 94025

Quite a bit of information has already been collected and collated and it looks real good from here and now. Let's get it on for our Canadian Brothers and Sisters. Shanti.

Electronics

Some of us at Whole Earth are trained and have worked in electronics. We are frankly dubious as to what the catalog can do with electronics, or, more accurately, what can people do with electronics? (Somebody once suggested that electric sex aids be included on the electronics page.)

The only way I have thought of to present electronics is through some kind of skills chart (ugg!) to sort us out into levels and provide information at each level. Like, a kit builder doesn't need a Tektronix catalog. (Or a ham, or—almost everyone else.)

Any concept of "Whole Earth" must include an effective, world wide, people-to-people communications network—and any publication aspiring to be an "access to tools" would naturally further this concept.

Ham radio has a helluva potential for such a concept, but its mostly being wasted at this point in conversing about weather, equipment, signal strength—or that most agonizing of inane activity, QSL'ing. Maybe CB is better in some ways, I don't know. But the potential is there: lets begin to use it.

We need any suggestions and/or reviews on electronics books at all levels of endeavor, from beginning kit construction to advanced design. We need information on sources for parts and equipment. We need information concerning individuals and/or groups doing good things with radio, TV, electronics.

Nor will the section be limited to radio. We plan to range from basic theory to construction skills to, and including, design & experimental development; from audio to video to microwave; from stereo tape systems to remote control mechanisms to computers to lasers.

Any takers?

Les

Discrete transistors (where electronics was 10 years ago) are very easy to work with. It is far easier to get into construction and design with transistors than it ever was with tubes. No chassis, no heavy components to mount, no high voltage, power supply can be a battery, etc. Very cheap, too. Trying to work with "state of the art" components (wherever that is now) is very expensive, parts are difficult to get and information is often unreliable.

Sometimes it is not necessary to actually design circuits. Just pick out a ready made circuit or circuit design, put it together, and presto!

Also, it is not necessary to make new things to use electronics. It is nice to be able to repair things, and it is often possible to modify something old. TV into oscilloscope, etc.

Some books we are considering. Reviews welcome.

Various Silicon Controlled Rectifier Manuals (IRC, Motorola, GE). Suggested by Marv Vickers.

Elements of Radio by Marcus and Marcus. Prentice-Hall, 1965; \$8.50. Suggested by Wayne Egan

Reference Data for Radio Engineers by IT&T Corp. American Book-Stratford Press. Suggested by Alexander Sproch

Kepeco Power Supply Handbook, Kepeco, Inc., Flushing, NY. \$3.75. Suggested by Marv Vickers.

High Fidelity Systems by Roy F. Allison. Dover Publications, NY, \$1.25.

Basic Electronics, 6 vol; *Basic Electricity*, 5 vol, by Valkenburgh, Nooger & Neville. John F. Rider, New York. \$2.75 each vol.

Fred

Another Possibility

The guys at Whole Earth Access Co. in Berkeley have evolved this good vision:

The idea is to start a WHOLE EARTH FOUNDATION with three main functions:

(1) Provide a simplified way for W.E. stores to stock. No one digs keeping extensive files, not everyone can handle the bookkeeping. By doing a WHOLESALE gig, we can supply stores w/ most all their stock at essentially the same discount they could get dealing direct with the publisher or manufacturer. All this on a single account basis!

(2) Profits would go into a fund to help new stores get it together. The money could also be used for various useful projects.

(3) Develop techniques toward the establishment of an alternative to the present rip-off retail system in this country. The project is still coming together—all ideas, suggestions, warnings, help, etc., etc. are welcome.

Obviously we can't make any offers yet for (1) financial aid or (2) gainful employment.

Love,

Mick Rosen
2466 Shattuck
Berkeley, CA 94704

The Quick Hard Summary.

In the September 69 Supplement, Stewart boldly invited anyone who was thinking of opening a Whole Earth Store to write to Hal for a quick hard summary. We've since had many inquiries & various of our staff have written numerous more or less quick & more or less hard summaries. Here's a sort of composite of all that information. We've also told folks to write to the two going stores we now know of, & they've been very helpful:

Whole Earth Access Co. 2466 Shattuck Berkeley, CA 94704 (415) 848-0510	Whole Earth Cooperative 845 East Johnson Madison, Wisc 53703 (608) 256-8828
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The Quick Hard Summary

First, get lots of money to start with. Ideally, enough to run on for at least six months, preferably longer, & assuming whatever you make during the first raunchy months will go for unforeseen expenses, which there always are. A very rough minimum estimate is \$10,000; it depends a lot on how much space you want to occupy & what you plan to do with it. Basic necessary expenses are: rent—often first & last months', plus cleaning deposit maybe—utilities—gas, electric, phone, water, garbage, some deposits required; insurance; equipment & supplies (possibly cash register, adding machine, typewriters), forms, paper, notebooks, files; use permit from your city—not much (\$10-\$50); furniture & redecorating: desks, tables, chairs, shelving, display areas, signs, etc. (A lot can be done with used stuff) If you don't have them you'll need tools—hammers, saws, etc. And paint. Salaries—possibly the largest single item, unless people work for free, which tends to breed poverty & discontent. Now—assuming you have some bread, or think you can get some—find a place. Not too high-rent, but hopefully somewhere where people walk by a lot. Don't sign a lease until you have a friendly lawyer check it—most agencies use standard forms that are designed to screw the tenant, but you can change clauses you don't like if

they want to rent the building. Next: apply to your town or city for a use permit, which often takes a while to get. Without one you can be shut down forthwith. Apply to your state for a resale permit, same reason. Invite your local building inspector & fire inspector to come inspect—before signing a lease, if possible. Because—if you're in an old building, you may be required by law to make changes in wiring, plumbing, fix leaks, etc. at your own expense. Again this is preventative—later harassment can come from these areas, & you have no recourse. Again, a good friendly lawyer can be a lot of help in knowing local ordinances, etc. Also, lots of towns are zoned so that you can only do business in certain areas. Find out about zoning before renting.

Hopefully when you start getting your building into shape & see how much space you have, you can start ordering stock. A good idea is to figure out how much it's going to cost you to keep the physical place & the people going for six months. Then see how much money you have left & order your stock accordingly. You'll probably have already opened a checking account. If you're going to stock books, join the American Booksellers Association—\$25 gets you a manual of publishers with info on almost all publishers—their discounts, access info, credit terms, policies, etc., free advice; & so forth. You can also file a statement of your credit with their affiliated group—the American Book Publishers Council; whenever you open a new account with a publisher you just tell him your credit was established there, he looks you up, & things are speeded up considerably. Usually publishers & suppliers require payment in advance on your first, or first several orders—after a while you can order, be sent an invoice, & have 30 days to pay. The more you order at once, the better discount you get—it's a question of working up to where you're selling enough that you can afford to order in larger quantities. It takes an average of a month for orders to arrive. By the way, when opening accounts, please make it clear that you're not connected with us—we've had trouble already with publishers putting other people's accounts on our statements, because of similarity of names.

What to sell? Depends a lot on you. We do mostly books & that's what we know most about—also some merchandise (Ashley Stoves, Corona corn mill, Aladdin lamps, Snuggli baby carriers, etc.) & a few magazines. A lot of the people who've written to us are

interested in health food; arts & crafts, & other trips. Selling food requires special permits; that's about all we know. You can often get local arts & crafts on consignment (you pay the artist when the item is sold), which can save you some basic stock expense. A rule of thumb in ordering books is that cheap paperbacks sell the most—you can be surer of selling more of them than of the more expensive hardbacks. The Catalog itself is our bestseller, could probably be yours too.

OK. If you get this far—plan a gala opening for publicity—invite Everyone & serve cheap (homade!) goodies. Word of mouth is best advertising we've found. But you can put up posters, flyers, whatever. Try to get your local newspaper to do a feature on you. Smile a lot.

We'd like to see a Whole Earth Store in every town. Yea! But before you start, be sure you're ready to do business—you will have to hassle with publishers & suppliers, keep records, mess with forms, numbers, paperwork. You will need a lot of human energy—someone has to do: ordering stuff, keeping track of what comes in, selling stuff, bookkeeping, cleaning up around the joint, correspondence, typing, filing, building or buying equipment, furniture, painting, keeping track of what you have & what you need (inventory), business with landlord & miscellaneous officials, decision-making, paying bills & payroll, etc., etc. Our aim here is not to discourage anyone, but to encourage open-eyedness about the prospects. Failure is good education but bad karma. For sure you will need: pretty girls to work in your store, patience, more money.

Production Costs

Printing and Binding	\$3,000
Salaries	2,400
Composer	300
Film & Photo Paper	100
Rent	200
Telephone	50
Mailing and Postage	300
Total: \$6350 (not including research)	
35,000 copies printed March 1970	
Unit cost 18¢	

Business



Photo Credits

front cover, Leslie Acoca
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strip mining, p. 29, Billy C. Davis
field, p. 33, Karl Burton
back cover, Karl Burton

Suggestions for the WHOLE EARTH CATALOG

An item is listed in the CATALOG if it is deemed:

- 1) Useful as a tool,
- 2) Relevant to independent education,
- 3) High quality or low cost,
- 4) Easily available by mail.

Please fill in as much information as you possibly can; it helps a lot.

Date _____

My name _____

Address _____

ZIP _____

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I SUGGEST:

Title of book or name of item: _____

Author: _____

Price: _____

Publisher or supplier: _____

Address: _____

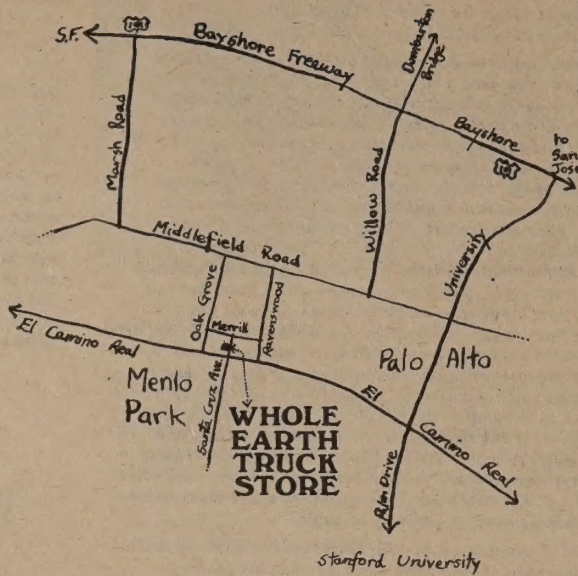
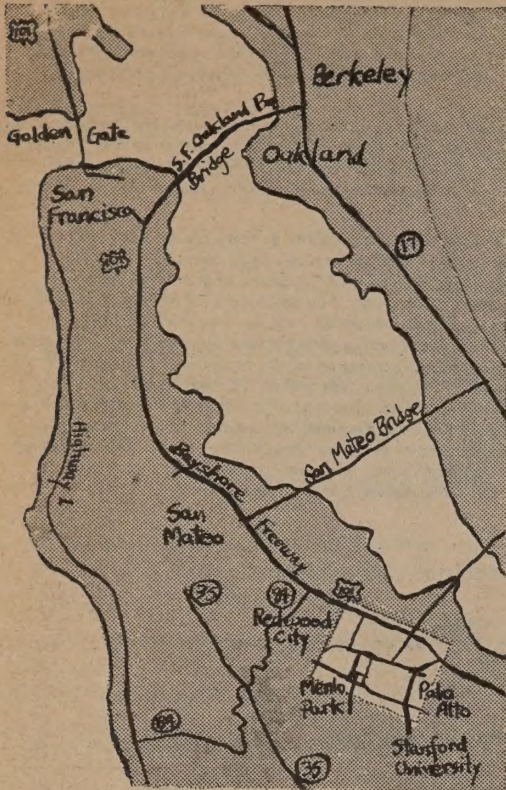
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If an item suggested is intended to replace an item already in the CATALOG, please fill in the item to be replaced: _____

- I would like to write a review.
- Attached is a review of this item.
- I would recommend _____
(name, address, phone)

_____ to review this item.

Additional information/review: _____



A major research source of ours is the Menlo Park Whole Earth Truck Store, which stocks most of the items in the CATALOG. We see who's buying what. We hear complaints and suggestions. We try out items that might be in the next CATALOG. We have a place where friends can come and see what's happening.

Hours: Monday-Friday, 9 am - 6 pm
Saturday, 10 am - 6 pm

558 Santa Cruz, Menlo Park, CA 94025

Phone: (415) 323-0313

Catalog Distribution

Book People, by agreement with the Bookworks, announces national distribution of

THE WHOLE EARTH CATALOG

The Whole Earth Catalog is published six times a year—2 large ones (Spring and Fall) and 4 smaller ones. As the materials are not completely duplicated, you can carry everything in print.

Currently available:

- Spring CATALOG \$4
- July 1969 Supplement \$1
- September 1969 Supplement \$1
- Fall CATALOG \$4
- January \$1 Catalog
- March \$1 Catalog

All retail, wholesale, and library distribution is processed through Book People; please do not direct your order to Whole Earth Catalog Store.

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- 15-up " 40%
- Wholesale: 100 up assorted 50%
- (qualification: meet the requirements of our certificate of wholesale endeavor)

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Credit accounts will be established through your Dun & Bradstreet rating, new businesses are advised to enclose their financial statement.
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For immediate shipments, please enclose check to cover order. Catalogs are \$4.00 retail for Fall and Spring issues, \$1.00 retail for the others (Jan, Mar, July, Sept). Figure your discount. Allow one pound for each catalog or each seven supplements. Figure your freight charges at Book Post rate:

12¢ first pound
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Thank you,
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2010 Seventh Street
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Portola Institute
558 Santa Cruz
Menlo Park, California 94025

\$ _____ Amount enclosed.

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- \$15 Five copies of Fall 1969 CATALOG
- \$ 8 One year subscription: six CATALOGS, two large (Fall & Spring) and four smaller.
- U.S. and Canada starting issue: 1969 Spring CATALOG 1969 July Supplement 1969 Sept. Supplement
\$9 surface elsewhere; Check one box only 1969 Fall CATALOG (late November) 1970 Jan. \$1 Catalog 1970 March \$1 Catalog
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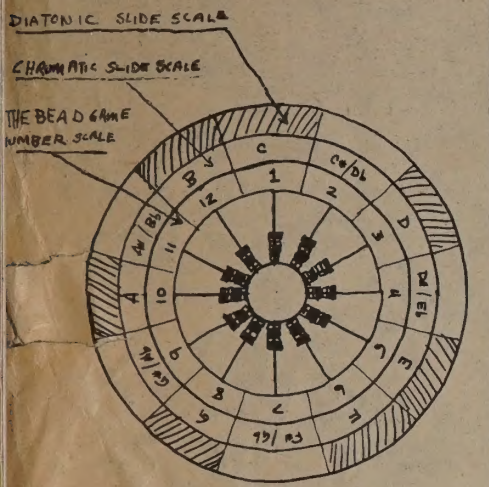
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PI

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Music Studies Program



The Bead Game
MARK III

© August 1969
Peter Lian Sebring

*Portola Inst.
Menlo Park Calif*

The Bead Game: a composition system

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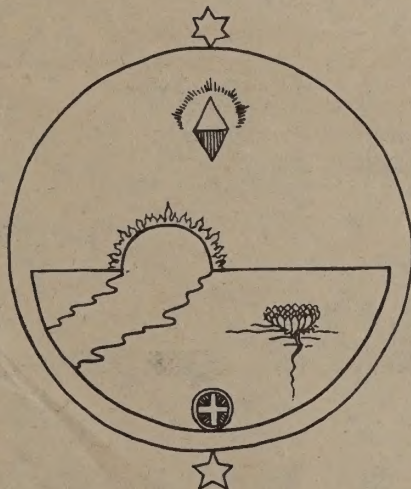
Ortega Park Teachers Laboratory



Two posters for recent meetings at Ortega Park.



Big Rock Candy Mountain



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Portola Institute, Inc.
1115 Merrill Street
Menlo Park, CA
94025

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